# THE ATTITUDES OF OLDER ADULTS LIVING IN INSTITUTIONS AND THEIR CAREGIVERS TO AGEING

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#### **SUMMARY**

*Objectives*: The aim of this study was to explore the attitudes of older people living in institutions and their caregivers to ageing. Recent outcomes showed prevailing negative social stereotype to ageing in CR.

Methods: The Attitudes to Ageing Questionnaire (AAQ–24) was used in two waves of data collection to measure attitudes of 400 randomly selected residents of 19 Senior Residential Homes. The reduced sample of 220 seniors and 276 professional carers employed at twelve Senior Residential Homes completed 12 items of general form (AAQ–12). All respondents expressed their agreement or disagreement with the statements presented in the questionnaire regarding positive or negative attitudes to ageing.

Results: The AAQ total score proved significant influence of gender, having children, self-perceived health, depression, and quality of life. Subscale scores (psychosocial losses, physical changes, psychological growth) were significantly influenced by gender, age, activities limitations, having own children, depression, self-perceived health status, and quality of life. Globally, the attitudes of professional caregivers to ageing were more positive compared to the attitudes of older people living in institutions. Older adults showed higher agreement with negative statements about ageing. There was no difference between professional caregivers and older people in the positive attitudes to ageing expressed as the growth potential. Physical activity, wisdom, better ability to cope with life and contacting young generation were effective in the positive attitudes of both groups.

Key words: attitudes to ageing, three dimensions of ageing, older adults, senior residential homes, care staff, successful ageing, old-age paradox

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#### INTRODUCTION

Factors influencing the attitudes of older adults to ageing are very diverse, ranging from the social climate in the ageing society, through the self-perceived health status and overall quality of life to the values and life orientation of the personality. This study set out to explore the influence of specific life conditions in institutions on the attitudes of older people living there. The attitudes to ageing of older people living in institutions are compared with the attitudes of staff working in these institutions.

# **Demographic Changes and Social Environment in the Czech Republic**

In the last two decades, the life expectancy increased from 67.6 to 74.7 for males and from 72.9 to 80.7 for females in the Czech Republic (CR). In 2011, nearly 16% of population (1.7 M) were aged 65 years and over. Estimates suggest that this proportion will increase to 20% in 2020, and nearly to 32% in 2050 (1). Concerns about the costs of an increasing proportion of older adults in the population has already led to changes in the retirement system, and older adults feel endangered by demographic panic and age

discrimination. Vidovicova (2) has demonstrated the presence of ageism, negative attitudes and prejudices against older adults in the Czech society. In the media, negative perceptions are much more common than positive ones, older persons are frequently associated with powerlessness and dependency. Deficiencies in health and social care can be also considered as indirect age discrimination, for example absence of adequate system of the long-term care or prevalence of maltreatment of older people within the system of care provision. Although there are political programmes to prevent social exclusion of older adults and to deal with principle problems connected with population ageing (3), many challenges arising from the demographic changes are still waiting for solutions.

# The Situation and Health Status of Older People Living in Institutions in CR

In CR, older adults feel subjectively worse in terms of health status than in many other EU countries (Table 1).

Based on the European Health Interview Survey 2008 (4), 6% of Czech males and 14% of Czech females aged 65–74 years perceived their health as bad or very bad, at the age 75+ it was 29% and 35%, respectively.

**Table 1.** Proportion of population with very good self-perceived health status by age in European countries in 2011 (%)

GEO/AGE	From 75 to 84 years	85 years or over	
Hungary	0.2	0.3	
Poland	0.6	0.8	
Czech Republic	0.9	1.5	
Portugal	1.1	0.3	
Austria	4.7	2.6	
Belgium	6.8	8.4	
Denmark	14.3	15.1	
Sweden	14.7	8.3	
Iceland	18.2	10.4	

Source: Eurostat [Internet]. Brussels: EC; 2012. Available from: http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do. Extracted on 17.11.2012.

At the same age, 82% of males and 85% of females have undergone long-term medical treatment and 67% of males and 72% of females were limited in their daily activities (4). The life expectancy for Czech females at the age 65 is 19.2 years while their healthy life years 8.8 years. Life expectancy for Czech males aged 65 is 15.6 years and their healthy life years 8.5 years. It means that Czech females will live 10.4 years and Czech males 7.1 years with some disability (5). According to the Czech Statistical Institute, the number of people aged 85+ is increasing rapidly and it will be 7.5 times higher in 2066 (6). All these figures show that in CR high proportion of individuals aged 65+ will experience some activity limitation or long term disease.

About 3.5% of Czech seniors aged 65 years and over (about 56,000 persons) live in health or social institutions (7). Vidovicova and Lorman (8) showed that almost 20% of respondents living in the Senior Residential Homes had encountered, to a varying extent, a certain form of mistreatment, 8% felt threat from a family or a staff member or from other residents, 6% experienced mistreatment, abuse or neglect, personally. 10% of respondents mentioned that someone from their surroundings (mostly staff) indicated that they bothered them with their problems. 25% of respondents lived in institutions because they did not have anybody to take care after them and felt lonely at home and 50% of respondents required all day care. Malpractice in the institutional care was also confirmed by the Ombudsman's survey carried out in the Senior Residential Homes (9). The data showed that seniors living in institutions represented a fragile and vulnerable social group. The impact of these conditions on the attitudes to ageing of both the older people and the caring staff has not yet been fully investigated (10).

## Theory of Ageing and Attitudes to Ageing

Attitudes to ageing refer to knowledge on ageing, experience (expectations, worries, emotions) and behaviour (activities, decisions) connected with ageing. The attitudes are determined individually and socially. They differ according to cultural values and they are linked to the development of modern medicine and

changes in health conditions of the ageing population. During the period of ageing, health, social and informal family care play roles in dignity feeling, and security and satisfaction perception.

All these factors together with a highly prized value of activity, achievement, work, consumption, and competition in modern societies are the sources of myths, which influence the attitudes to ageing of both seniors and the society (11). Myths include stereotypes and prejudices about ageing. They relate to work, health, mobility, decision making, free time activities, family, psychological characteristics, anxieties, fears, social integration, sexual life, and all other aspects of seniors life. The most common myths are decreasing physical and mental abilities of seniors and inevitable increasing dependency of older people on the help of others. To be old is considered to be weak and decrepit rather than wise and mature and ageing is presented as a period of losses (12). Negative attitudes to ageing are manifested in the form of ageistic ideology firstly identified by Robert Butler as a systematic discrimination of people because of their age (13).

While the common characteristics of ageing are predominantly losses, seniors' experience is rather different. The results of the research, in which older adults were directly asked about ageing, surprisingly showed that ageing was quite often perceived by older adults as something positive – as a chance to grow, develop and experience positive changes (14). This absence of negative age effect has been called "the paradox of ageing" (15, 16).

From the lifespan perspective, old age is just one of the human life phases, a multidimensional experience, where both losses and winnings are present, similarly like in other phases of life (17). Some theories consider ageing as a stage of life cycle with specific developmental tasks. Erikson spoke about the stage of integrity and wisdom when a person would be able to accept the course of life as it had been lived, and prepare oneself for the coming death (18). Butler's concept of "life review" is also related to the developmental task of later age. Reviewing back the life course contributes significantly to the resolution of past conflicts and injustices, to reconciliation, integration and serenity (19). Cohen described old age as an important and valuable stage of life connected with final development of human brain, which is ready to process and re-value previous life experience, thus gaining psychological maturity (20).

The concept of successful ageing was originally related to the absence of disease and to good physical and mental functioning including autonomy and social support (21). Later, in the framework of socio-psychological models, life satisfaction, participation, and psychological resources were emphasised and culminated in the positive psychology movement (22). Lay definitions of successful ageing were also taken into account. They usually included psychological, physical and social health, functioning and resources, life satisfaction, a sense of purpose, financial security, learning new things, accomplishment, physical appearance, productivity, sense of humour, and spirituality (23).

In our study, we assessed the impact of various factors on the attitudes of older adults living in institutions to ageing with the use of Laidlow's Attitudes to Ageing Questionnaire (AAQ) measure (24)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Laidlow and his colleagues from the WHOQOL-OLD Group (25) interviewed seniors themselves when developing a self-report measure the Attitudes to Ageing Questionnaire (AAQ). They worked on the assumption that older people are experts on ageing and are the only social group that can express what is involved in the process of adaptation to ageing. The measure was validated in 20 countries worldwide including the Czech Republic and allows us to learn how older persons themselves perceive their aging and old age.

In the final 24-item version of this questionnaire he identifies two (or rather three) broad dimensions of ageing:

- 1. *physical functioning* (8 items including health, dynamics, vitality, exercising) and
- 2. psychological experience. The latter is split into two subscales: (a) positivity (psychological growth), which reflects explicit gains in relation to self and others; positive focus of ageing, life orientation, connection with "wisdom" and "fruits of life", coping, acceptance, communication with young generation (8 items); (b) negativity (psychosocial losses), when old age is primarily described as a negative experience including losses, deficiency, exclusion, loss of independence, depression, and loneliness (8 items).

#### MATERIALS AND METHODS

#### **Objectives**

This study is partially making use of data from two research projects (26, 27) coordinated by the Centre of Gerontology in Prague conducted in 2005–2008. The aim of these projects was to evaluate the effect of psychosocial interventions (reminiscence and dance therapy) on the health status and the quality of life of seniors living in Senior Residential Homes using the set of instruments including the measure of attitudes to ageing (AAQ). In our study, the measure was administered also to the staff of Senior Residential Homes.

We focused on the following research questions:

- 1. How older adults living in institutions perceive ageing and old age? To what extent they agree with positive or negative appraisal of ageing? What items of AAQ most correspond to their attitudes?
- 2. Are three dimensions of attitude to ageing measured by AAQ (psychological growth, psychosocial losses and physical functioning) influenced by socio-demographic or clinical characteristics of respondents?
- 3. Is there a significant difference in attitudes to ageing between seniors living in institutions and their professional caregivers? What characteristics might influence the perception of ageing by staff?

The design of our study was a cross-sectional survey, the research instruments were administered in the form of interviews. Respondents were the residents and the staff of Senior Residential Homes. Data were collected in two waves using the original field version of the questionnaire (AAQ–38 including 12 items of a general form), in the first wave (N=220) and the final AAQ–24 (a personal form) in the second wave (N=180) of the research.

#### Sample

The original seniors sample was comprised of 400 randomly selected residents of 19 Senior Residential Homes in CR who provided informed consent with their participation in the project. The sample was composed during two waves of data collection. Respondents with severe dementia (MMSE<15) were excluded. Final senior sample consisted of 364 respondents, out of them 84% were women. Their age ranged from 59 to 102 years (mean=82,

median=83). Most respondents, 92%, had no partner and 23% were childless. 39% had mild or moderate dementia (MMSE 15–24). A reduced senior sample used for the comparison with the staff consisted of 220 respondents from the first wave who completed 12 items of a general form. Out of them, 82% were women. Their age ranged from 59 to 98 years (mean=82). The staff sample consisted of 276 professionals working in 12 Senior Residential Homes. 95% were women. They completed 12 items of a general form.

#### Methods

Data were collected using the individual structured face to face interviews with seniors. The attitudes to ageing were measured by the 24-item WHO AAQ where respondents are asked to give their agreement or disagreement with positive or negative statements on the 5-point Lickert scale. Response scales of negative statements were reversed and recoded so that the higher value means more positive attitude (i.e. agreement with a positive statement or disagreement with a negative statement). Data from the staff were collected using 12 items measure (AAQ–12) of a general form (originally part of the 38-item version of AAQ) investigating general attitudes to ageing.

#### **Instruments**

For this study, we used the Attitudes to Ageing Questionnaire (WHO AAQ), both 24 items of a personal form (the validated 24-item AAQ measure) and 12 items of a general form that were originally part of the 38-item field version of AAQ. 24 items investigating personal experience with ageing together with 12 items (AAQ–12) about general attitudes were administered to 220 residents in Senior Residential Homes. Staff working in Homes (N=276) completed AAQ–12. These data were used for the comparison of the staff attitudes to the attitudes of residents. AAQ–24 was administered in the second wave of data collection to 180 residents of Senior Residential Homes.

The battery of instruments to measure seniors quality of life, functional and mental health status further included: WHO-QOL-BREF (the World Health Organization Quality of Life Assessment) (28), MMSE (Mini Mental State Examination) (29), GDS-15 (Geriatric Depression Scale) (30), ADL (Activities of Daily Living) (31) and own socio-demographic form including demographic data, self-reported health status, satisfaction with care, and satisfaction with relationship with children and grandchildren.

### **Data Analysis**

Global attitude to ageing score (total score) and total subscale scores were calculated as the sum of items values. Descriptive statistics was used to examine frequency distributions and means of the variables. The differences between subgroups were analysed using independent T-test or one-way analysis of variance (ANOVA) with p=0.05 as the level set to determine statistical significance. Spearman coefficient was used to indicate associations among variables describing different aspects of self-reported satisfaction. The Statistical Package for Social Sciences (SPSS) version 17.0 was used for analyses.

#### **RESULTS**

## The Health Status of Respondents Living in Institutions

In our sample of respondents, over 75% suffered from activity limiting pain. Out of them 34% had bad pain and 52% of them were not taking any painkiller (34). Nearly two-thirds of residents showed certain limitations in mobility, out of them 7% were assessed as totally or highly dependent (ADL<60). The proportion of people with mild or moderate dementia was very high (39% with MMSE 15–24). Nearly half of the sample (44%) had symptoms of depression, out of them only about 18% received antidepressants (32).

In spite of the fact that high proportion of the Senior Residential Homes residents experienced pain and functional impairments, 43% of them perceived their health as good or very good, which was more than in the representative sample of the Czech population (Table 2). The proportion of respondents who perceived their health as bad or very bad (29%) was also lower compared to the representative sample.

Results showed that seniors' subjective reflection of their situation was relatively positive. In spite of the limitations of their living conditions, 61% of respondents expressed their satisfaction or even very high satisfaction with their global quality of life (general question in WHOQOL-BREF regarding global life satisfaction) and 87% declared their satisfaction with the quality of care (39% very satisfied and 48% satisfied) (Fig. 1).

**Table 2.** Self-perceived health status of population aged 75+ and residents of seniors institutions

Self-perceived	Residents	Population 75+**	
health status	of institutions* (N=364)	males	females
Good	43%	22%	19%
Neutral	28%	49%	46%
Bad	29%	29%	35%

<sup>\*</sup>own data

<sup>\*\*</sup>EHIS 2008, Institute of Health Information and Statistics of CR (4)

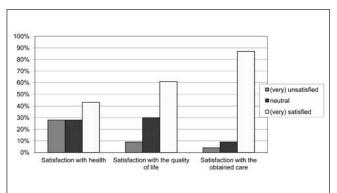


Fig. 1. Satisfaction of seniors living in institutions with own health\*, quality of life\*\* and obtained care\*\*\* (N=364).

Statistically significant correlation among all three variables at the 0.01 level (2-tailed).

# The Attitudes of Seniors Living in Institutions to Ageing

The results in Table 3 show the final ranking of 24 items according to AAQ subscales (physical functioning, psychological growth, psychosocial losses). The mean values for each item are presentend. The higher the mean value, the more positive (or less negative) attitude to particular item respondents expressed. On the other hand, low mean values reflected weak or negative experience expressed in respect of the item concerned.

The physical changes subscale had the lowest appraisal in general and contributed to the negative attitudes of seniors living in institutions to ageing. Exercising and activity played an important role. Seniors referred to the statement that it was necessary to keep oneself as fit and active as possible by exercising. On the other hand they were concerned about health problems, worse

**Table 3.** Ranking of the AAQ items expressing attitudes of older people living in institutions to ageing

AAQ items labels	Mean score N=364		
Subdimension: physical change			
Important to take exercise at any age	4.15		
Keep myself as fit and active as possible by exercising	3.12		
My identity is not defined by my age	3.05		
Growing older easier than I thought	2.87		
I don't feel old	2.82		
More energy now than I expected for my age	2.57		
Health is better than expected for my age	2.56		
Physical health problems don't hold me back	2.43		
Global mean score	2.95		
Subdimension: psychological growth			
Better able to cope with life	3.51		
Wisdom comes with age	3.35		
Give a good example to younger people	3.31		
Important to pass on benefits of experience to younger	3.28		
Believe my life has made a difference	3.09		
Many pleasant things about growing older	2.98		
Privilege to grow old	2.88		
More accepting of myself as I have grown older	2.76		
Global mean score	3.15		
Subdimension: psychosocial loss			
More difficult to talk about my feelings*	3.38		
Don't feel involved in society*	3.37		
More difficult to make new friends*	3.13		
I see old age mainly as a time of loss*	3.01		
I feel excluded from things because of my age*	2.91		
Losing my physical independence as I get older*	2.90		
Old age is a time of loneliness*	2.84		
Old age is a depressing time of life*	2.82		
Global mean score	3.04		

<sup>\*</sup> Reversed response scale, score recoded

<sup>\*</sup> Socio-demographic form

<sup>\*\*</sup> WHOQOL-BREF

<sup>\*\*\*</sup> Socio-demographic form

health than expected and lack of energy. They did not deny that they really felt old and that growing older had been more difficult than they had ever thought.

In the psychological growth subscale respondents agreed with the statement that better coping with life and gaining wisdom in old age are positive signs of ageing. It was very important for the older adults living in institutions to keep contact with young generation, to give a good example to younger people, and to pass on their experience to the young. In general, this dimension contributed most to the positive appraisal of ageing at residential homes.

In the psychosocial loss subscale social inclusion was considered very important. Seniors doubt the statements declaring that they would not be involved in society or could not talk about their feelings with other people because of age. Most respondents did not feel any difference as for making new friends. On the other hand, the agreement with negative statements regarding exclusion from things because of age, losing physical independence, old age as time of loneliness or depression was quite frequent.

# Differences between Subgroups in Attitudinal Subscales

Further statistical analysis was accomplished to find which variables were contributing significantly to the differences within described dimensions of the attitudes to ageing. In fact, all described variables had a specific influence in one or more subscales. Significant differences between subgroups are indicated in Table 4.

The differences in the attitudes to ageing dimensions were determined by the following variables:

*Gender:* Males had significantly more positive attitudes to ageing than females in the dimension of psychological growth.

*Age:* The older the people were, the worse score in the dimension of psychosocial losses they had. For very old people ageing was connected with losses, exclusion, dependency, and depression. Feeling of loneliness was also present.

Children: Childless respondents perceived the old age significantly more negatively compared to those with children. For childless respondents ageing was more frequently viewed as the period of losses, exclusion and dependency. They also felt lesser opportunities for psychological growth and expressed negative attitudes in the area of physical changes – experience of losses in vitality, dynamics and health.

*Health:* Respondents with worse self-perceived health had more negative attitudes to ageing. They experienced significantly more psychosocial losses (ageing as a period of exclusion and dependency). Also in the area of physical changes (vitality, dynamics) they expressed negative attitudes.

Depression: Contributed significantly to worse attitudes to ageing in all dimensions, specially to the negative experience in the area of psychosocial losses. Depression was also connected with the lack of vitality in physical area and with limited possibilities in the area of psychological growth.

*Activity:* People who were highly limited in their activities (ADL  $\leq$  60) had significantly worse attitudes to ageing in physical dimension.

Quality of life: People, who were not satisfied with their quality of life had also significantly worse attitudes to ageing in both psychological and physical dimensions (they did not see growth opportunity and had less energy and vitality).

*Pain:* Respondents with pain experienced ageing negatively in psychosocial losses dimension (feeling excluded, lonely, with difficulties to talk about their feelings). The pain did not have any specific effect in the physical area or in psychological growth dimension.

The total attitude to ageing score was calculated by summing up all item values of the questionnaire. The minimal value of the total score was 24, maximal value was 120. Significant differences were the following:

- males had more positive global attitude to ageing compared to females (p=0.030);
- respondents with children had more positive global attitude to ageing than those without children (p=0.004);
- respondents who perceived their health as good had more positive global attitude to ageing compared to those who evaluated their health as worse or bad (p<0.001);</li>
- respondents without depression had more positive global attitude to ageing compared to those who had mild or bad depression (p<0.001);</li>
- respondents with good self-perceived quality of life had more positive attitude to ageing compared to those with average or bad quality of life (p<0.001).</li>

There was no significant influence of age and level of activity (ADL) on the total attitude to ageing score. On the other hand, significant influence of gender, having children, self-perceived

Table 4. Differences between subgroups in three subscales of AAQ

Variable	Psychological growth	Physical changes	Psychosocial losses	
Sex <sup>1</sup>	0.029	NS	NS	
Age <sup>1</sup>	NS	NS	0.017	
Children <sup>1</sup>	0.055	0.025	0.018	
Health <sup>1</sup>	NS	0.000	0.000	
Depression <sup>2</sup>	0.000	0.000	0.000	
Activity <sup>3</sup>	NS	0.016	NS	
Quality of life <sup>4</sup>	0.000	0.000	0.000	
Pain <sup>1</sup>	NS	NS	0.024	

¹Socio-demographic form

<sup>2</sup>GDS 15

3ADL

<sup>4</sup>Q1 item in WHOQOL-BREF

health, depression, and quality of life was proved in both the total score of AAQ and in subscale scores.

## Differences between Older Adults Living in Institutions and their Professional Caregivers in Attitudes to Ageing

Significant differences between the staff and the residents were determined using the independent t-test. Results presented in Table 5 show that staff had significantly more positive attitude to ageing (total score=3.33) than seniors (total score=3.15), (p<0.001).

There was a significant difference between these two groups in negative attitudes. Compared to staff, seniors living in institutions significantly more frequently agreed with all negative statements about ageing (regarding ageing as a period of psychosocial losses) (Fig. 2).

In positive statements regarding ageing as a chance to grow, the assessment of the two groups did not significantly differ (Fig. 3).

There were significant differences just in some items. The staff agreed more frequently than seniors that physical exercise was important in any age, that older adults were interested in love and that people were as old as they felt. On the other hand, the staff did not agree as frequently as older adults with the statement that seniors were better able to cope with life.

#### DISCUSSION

Prolonging life expectancy provides a chance to live longer but frequently with disability or with long term illness. The situation is worse in CR compared, for example, to Norway. Czech females will live 10.4 years and Czech males 7.1 years with some disability while the outlook for Norwegian female is just 5.7 and for Norwegian males 3.7 years of life with disability (5). Research conducted by the Centre of Gerontology in Prague in the years 2005–2008 regarding the health status and quality of life of seniors living in institutions (26, 27) pointed out the high prevalence of health problems in institutional care for older adults in CR (32).

In accordance with the theory of successful ageing many older adults regard themselves as happy and well, even in the presence of disease or disability (33). There is a question if successful ageing is just a social pattern of ageing in modern societies forcing older adults to present themselves and behave in a specific way, or if successful ageing belongs to the basic psychological needs of human beings to live life which is subjectively valuable and good. Empirical evidence says that there is no age-related decline in life

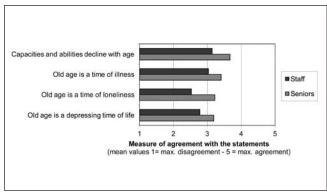


Fig. 2. Comparison of the staff and the seniors living in institutions – negative attitudes to ageing.

\*In all items the difference was statistically significant (p<0.001)

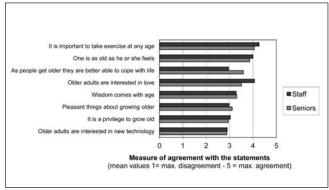


Fig. 3. Comparison of the staff and the seniors living in institutions – positive attitudes to ageing.

\*In the item "As people get older they are better able to cope with life" the agreement of seniors was significantly higher than the agreement of staff (p<0.001) In the items "Older people are interested in love" (p<0.001), "It is important to take exercise at any age" (p=0.002) and "One is as old as he or she feels" (p=0.051) the agreement of staff was significantly higher than the agreement of seniors.

satisfaction in old age in contrast to frequently observed declines in the objective quality of elder people lives. The determinants of life satisfaction in old age are therefore frequently studied (16, 34). Theories of human life phases presenting old age as a stage of life cycle which has its value and its specific developmental tasks provide an answer (17–20). Socio-psychological models of ageing point out the need to use subjective, psychological resources in order to meet the conditions of older age succesfully (14, 22, 35).

Our results showed the tendency of older adults living in social institutions to report higher satisfaction with the quality of life in spite of the worse indicators of their health status (Fig. 1, Table

Table 5. Differences in total scores of the 12-item AAQ between staff members and seniors living in institutions

Attitudes to ageing	Max. value of the score <sup>1</sup>	Staff (N=276) mean total score	Seniors (N=220) mean total score	Sig.
Negative attitudes – total	20 = the worst	11.48	13.50	0.000
Positive attitudes – total	40 = the best	27.48	27.25	0.450
Total mean score of attitudes	5 = max. positive attitude to ageing on the scale 1–5	3.33	3.15	0.000

<sup>&</sup>lt;sup>1</sup>Each item of the AAQ-12 questionnaire (12 general statements on ageing – 8 positive and 4 negative) was assessed by each respondent on 5 point scale expressing the measure of agreement with the statement.

2). These institutionalised older adults often suffered from pain, which moreover was not treated. Two-thirds had limitation in their everyday activities. 44% of them had symptoms of depression, which was nearly twice as much as the prevalence of depression presented in other studies of population aged 80 and over (36). Though there are studies proving the positive effect of reducing depression on successful ageing (34), only a small part of these residents received antidepressant (26, 27, 32). But surprisingly, 60% of them still expressed satisfaction with the global quality of life and nearly half perceived their health as good. Thus our findings coincide with many other findings regarding paradox of ageing (16, 23, 33-35). The life satisfaction, self-perceived health status and self-perceived quality of life of older adults in our sample contrasted with the observed objective quality of life and living conditions which were described earlier in this study (8, 9). Similarly, Strawbridge et al. in their qualitative study reported that in terms of their own criteria half of the seniors met conditions for ageing successfully. On the other hand, less than one fifth of them would be considered as ageing successfully within the medical model concentrating on the absence of disease, maintenance of physical and cognitive functioning and activity (35). In Bowling and Dieppe's national survey even 75% of the representative sample of population rated themselves as ageing successfully (33). In their recent study (Successful Aging Evaluation – SAGE), Jeste et al. came to the conclusion that primarily depression had a detrimental impact on successful ageing. According to their results, increasing resilience and reducing depression might have as strong effect on self-rated successful ageing as that of reducing physical disability (34).

Through AAQ and its three subscales we could measure various positive and negative aspects of ageing of people living in institutions. It is necessary to underline that old people talked about their own experience with ageing (feeling old, lonely, depressed, physical dysfunction) and life in caring institutions. Comparison of differences between sub-groups proved the influence of gender, having children, perceived health status, depression, and self-rated quality of life of older adults living in institutions on their global appraisal of ageing. The role of gender was not proved in other studies (10). Exercising and activity as well as social inclusion played an important role in positive or negative attitudes to ageing in one or more of three dimensions. In spite of the presence of negative aspects, positive attitudes to ageing seemed to be more important, influenced specially by gender, age, having own children, self-perceived health, presence of depression, activity limitation and pain, and self-perceived global quality of life. Specially depression together with resilience was proved an important factor in successful ageing also in other studies (34).

Our principal results referred to three dimensions of ageing described by Laidlow (24) and strived to understand which factors of older adults life contributed to each of the dimensions (research question 2). We also intended to describe what seniors meant by expressing positive or negative attitudes to ageing (research question 1).

Positive attitudes to ageing (potential to psychological growth) expressed by older adults living in institutions were related to self-perceived quality of life and subjective health status, specially if depression was not present. Own children were important as well as to be a male. Positive attitudes to ageing were also related to seniors strong agreement with the importance of exercising and

ability to cope with life. Wisdom coming with the age and relation to younger people were appreciated. Old people did not identified themselves with the statements regarding social exclusion and limitations in expressing themselves. Their attitudes showed positive experience with activity, social inclusion and growth, which were still present regardless of the institutional conditions. Our results slightly differ from the study of Bužgová and Klechová (10). Our seniors were even more optimistic in their attitudes in some items (coping with life, importance of exercising and activity, growing older is easier, growing older brings pleasant things) than the community-dwelling adults (10) or general population (37). However, the meaning of life in old age was not as highly evaluated as in the research of Bužgová and Klechová (10).

Physical changes were positively accepted if self-perceived quality of life and health status were good, if people were not limited in their activities, if they lived without depression and had their own children. The presence of objective physical changes and health problems was reflected in higher agreement of older people with negative statements regarding decline of abilities, loneliness, diseases, and depression connected with ageing (Fig. 2). While in our research people with activity limitation had significantly worse attitudes to ageing in physical dimension than seniors without activity limitation, other results were surprisingly quite opposite (10). It is worth mentioning, that reducing depression might have as strong effect on successful ageing as reducing physical disability (34).

Negative attitudes to ageing (experience of psycho-social losses) were significantly more often expressed by very old people. Bužgová and Klechová (10) came to the same conclusion - the older people were, the more negative attitudes to ageing they had. Negative attitudes were also expressed if people had no children, if their subjective health status and satisfaction with the quality of life were bad, and if they suffered from depression and pain. If seniors in institutions expressed negative attitudes to ageing very strongly, it was firstly associated with physical health. They disagreed with the statements which talked positively about health and energy in old age and agreed with negative statements concerning depression, loneliness and loss of physical independence. Their attitudes showed disillusion from the impact of bad health on their life. In the mentioned study (10), it was observed that these negative attitudes occured more frequently in seniors living in institutions.

In accordance with the psychosocial model (14) of successful ageing and with the developmental theory regarding the specific assignments of the last period of life (18–20), our results showed that even under unsatisfactory conditions of life, like depression, loneliness and loss of physical independence, the seniors declared relatively good health and satisfaction with their lives. In spite of bad living conditions and bad objective health status the seniors in institutions showed signs of vitality and psychosocial growth. Their attitudes regarding physical exercising, emotions, coping, wisdom, relations to young generation, and social inclusion were positive.

Our last research question asked professional carers to reflect their experience with ageing through their everyday caring experience. It was expected that the staff perception of old age would be worse, which would correspond with the old-age paradox (15, 16). In fact, seniors living in institutions agreed significantly more often with negative statements about ageing than the staff.

Despite direct personal contact with unsuccessful ageing from the perspective of objective, medical model (disability, incontinence, dementia, depression, pain), the attitudes of professional caregivers were better than attitudes of seniors who experienced depression, social isolation, decline in activities, and illnesses on their own. Seniors experience with the negative aspects of old age was perhaps even stronger than their caregivers could imagine. In this subscale (psychosocial losses), the attitudes of older adults were more negative than the attitudes of the staff (Fig. 2). It seems that usual old-age paradox showing the external evaluation worse than self-evaluation does not exist in these specific items of the AAQ scale. The direct experience of caregivers with unsuccessful aspects of ageing did not touch them very deeply. Another study comparing attitudes of seniors living in institution and those community-dwelling also showed significantly worse attitudes of the first ones at the psychosocial losses dimension (10). On the other hand, both older adults and staff believed that old age is also a chance to psychological growth and has positive dimensions. The results comparing people living in institutions and people living at community brought similar results (10). Further research in this field is necessary to explain the factors contributing to the old-age paradox and its limits.

#### **CONCLUSIONS**

The study has brought the evidence that older adults in institutions still feel their potential to manage their lives. In agreement with the developmental theory of ageing, there are factors supporting psychological growth of older adults in the late stage of life. Successful ageing belongs to basic psychological needs and means the life which is subjectively valuable and good, even if a person is old and objective reality is worse. There are studies providing empirical evidence of no age-related decline in subjective well being and life satisfaction in old age despite physical health losses. The need of ageing person to accept the life lived and the self concept as good, consonant and meaningful, seems to be very strong.

Our study proved that older adults perceived clearly the weakness and negative aspects of their ageing but tended to assess their health and quality of life as relatively good. Subjective need for continuous psychological growth was present even under the conditions of life in a caring institution. Positive attitudes related to activity, exercise and social inclusion. Our results showed that gender, own children, self-perceived health status, depression, and self-perceived quality of life were the most important factors affecting the attitudes to ageing. The most fragile old people in institutional care with significantly worse attitudes to ageing were women, old people without children, with bad health status, specially with depression and activity limitations and those, who perceived their quality of life and health status as worse.

From the perspective of the medical model most of the older adults living in institutions would not be considered as ageing successfully and having positive attitude to ageing. The objective health problems and psychosocial loses mirror themselves in seniors negative attitudes to ageing which are signifantly stronger compared to the staff negative attitudes to ageing. It seems that it is really difficult for staff to understand well the negative dimensions of ageing like illness, loneliness, depression, and decrease

of abilities. Taking into account the socio-psychological model reflecting participation, psychological resources, individual values, and chances of personal growth, much more positive attitudes of seniors and staff can be observed. While the staff positive attitudes to ageing predominantly contain physical exercising, interest in love and feeling old, older adults underline coping with life. All of them believe that old age provides opportunity of the continual positive growth.

The impact of our findings on the health and social care practice as well as on the public health is evident. The positive value of old age is based specially on the possibility of psychological growth. It means that care for psycho-social needs of older adults is equally important as the care for their physical health. The high appreciation of physical exercising, emotions, coping, wisdom, relations to young generation, and social inclusion in the attitudes of older people should be reflected in the approach and attitudes of staff in social and health institutions providing long term care. They should be trained to fully understand the impact of ageing processes on older people. They should know more about the process of adaptation to ageing - everyday experience of their ageing clients and patients. Individual care plans should reflect the attitudes of older adults to ageing, take into account their individual needs, not only in the area of physical health but also in other areas of their coping with life. Specially depression, pain, disability, and social isolation should be prevented and treated. It is important to keep contact with younger generation, support exercising and psychological growth.

From the wider perspective, the achievability of goals of the National Strategy for Positive Ageing (3) in CR depends on the attitudes to ageing of whole society. It is a question of ageism and other forms of perceiving older adults as a threat for the society. The attitudes of older adults to ageing must be taken into account. They are the principal factors of all processes regarding demographic ageing in whole society. That is why the attitudes of older adults to ageing must be respected on all levels. The knowledge of psychosocial losses is the challenge for psychiatrists to treat and prevent depression, for social workers, communities and families to prevent social exclusion, and for physicians to take care about physical health. The value and positive picture of ageing should be a part of educational process in schools and health promotion programmes. Positive attitudes of older adults to ageing, even if living in institutions, and even if the physical health is not perfect, bring the message, that the old age as the last phase of life has its value and it is worth living.

#### REFERENCES

- Czech Statistical Office. Public Database [Internet]. Prague: Czech Statistical Office; 2012 [cited 2012 Nov 17]. Available from: vdb.czso. cz. (In Czech.)
- Vidovićová L. Ageing, age and discrimination new connections. Brno: Masaryk Univerzity; 2008. (In Czech.)
- National Strategy for the Positive Ageint Support for the years 2013 2017 [Internet]. Prague: Ministry of Labour and Social Affairs of the Czech Republic; 2012 [cited 2013 Mar 25]. Available from: www.mpsv. cz/files/clanky/13099/Teze\_NS.pdf. (In Czech.)
- European Health Interview Survey in the Czech Republic EHIS 2008
  [Internet]. Prague: Institute of health information and statistics of the
  Czech Republic; 2011 [cited 2012 Mar 5]. Available from: http://www.
  uzis.cz/en/category/tematicke-rady/european-health-interview-survey-czech-republic-2008.

- Eurostat: Health [Internet]. Brussels: European Commission; 2012. Healthy life years and life expectancy at age 65, by sex; [cited 2012 Nov 20]. Available from: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tsdph220.
- Czech Statistical Office [Internet]. Prague: Czech Statistical Office; 2012. Survey of the disabled persons in the year 2007; [cited 2012 Mar 5]. Available from: http://www.czso.cz/csu/2008edicniplan.nsf/p/3309-08. (In Czech.)
- Průša L, at al. Provision of the social services for elderly and persons with disabilities. Prague: VÚPSV; 2010. (In Czech.)
- Stehlíková D, Vidovićova L, Lorman J. Life in the rest homes for older people 2007: elder abuse, neglect and mistreatment. Survey report. Prague: Office of the Government of the CR; 2008.
- Social care institutions [Internet]. Brno: Public Defender of Rights;
   2012. Reports from visits of homes for elderly people; [cited 2012 Mar
   5]. Available from: http://www.ochrance.cz/en/protection-of-persons-restricted-in-their-freedom/facilities/social-care-institutions/.
- Bužgová R, Klechová H. Measuring attitudes of seniors to ageing. Prakt Lek. 2011;91(7):396-401. (In Czech.)
- Ageing: exploding the myths [Internet]. Geneva: World Health Organization; 1999 [cited 2012 Mar 5]. Available from: http://whqlibdoc.who.int/hq/1999/WHO\_HSC\_AHE\_99.1.pdf.
- Levy BR. Mind matters: cognitive and physical effects of aging selfstereotypes. J Gerontol B Psychol Sci Soc Sci. 2003 Jul;58(4):P203-11.
- Butler RN. Age-ism: another form of bigotry. Gerontologist. 1969 Winter;9(4):243-6.
- Valliant GE. Aging well: surprising guideposts to a happier life from the landmark Harvard study of adult development. Boston: Little, Brown; 2002
- Science News [Internet]. Rockville, MD: ScienceDaily; 2012 Dec
   Paradox of aging: the older we get, the better we feel? [cited 2013 Jan 24]. Available from: http://www.sciencedaily.com/releases/2012/12/121207085549.htm.
- Schilling O. Development of life satisfaction in old age: another view on the "paradox". Soc Indic Res. 2006;75(2):241-71.
- Baltes PB. The many faces of human ageing: toward a psychological culture of old age. Psychol Med. 1991 Nov;21(4):837-54.
- Erikson EH, Erikson JM. The life cycle completed. New York: W.W. Norton: 1997.
- Butler RN. Successful aging and the role of the life review. J Am Geriatr Soc. 1974 Dec;22(12):529-35.
- Cohen GD. The mature mind: the positive power of the aging brain. New York: Basic Books: 2005.
- 21. Rowe JW, Kahn RL Successful aging. New York: Pantheon Books; 1998.
- Seligman MEP. Authentic happiness: using the new positive psychology to realize your potential for lasting fulfillment. New York: Free Press; 2004.
- Phelan EA, Anderson LA, LaCroix AZ, Larson EB. Older adults' views of "successful aging" - how do they compare with researchers' definitions? J Am Geriatr Soc. 2004 Feb;52(2):211-6.

- Laidlaw K, Power MJ, Schmidt S; WHOQOL-OLD Group. The Attitudes to Ageing Questionnaire (AAQ): development and psychometric properties. Int J Geriatr Psychiatry. 2007 Apr;22(4):367-79.
- The WHOQOL Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. Psychol Med. 1998 May;28(3):551-8.
- Janečková H, Vaňková H, Holmerová I, Kašlíková T; Gerontological centre Prague. The effect of reminiscence therapy on health status and quality of life of seniors living in institutions. Final report. Prague: the Internal Grant Agency of the Ministry of Health of the Czech Republic; 2008. NR 8488-3/2005. (In Czech.)
- 27. Veleta P, Holmerová I, Vaňková H; Gerontological centre Prague. Effect of dance therapy on health status and quality of life of seniors living in institutions. Final report. Prague: the Internal Grant Agency of the Ministry of Health of the Czech Republic; 2008. NR 8788-3/2005. (In Czech.)
- Dragomirecká, E, Bartoňová J. WHOQOL-BREF, WHOQOL-100: World Health Organization Quality of Life Assessment: quality of life questionnaire, user's manual, Czech version. Prague: Psychiatric centre Prague; 2006. (In Czech.)
- Folstein MF, Folstein SE, McHugh PR. "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. J Psychiatr Res. 1975 Nov;12(3):189-98.
- Sheikh JI, Yesavage JA. Geriatric Depression Scale (GDS): recent evidence and development of a shorter version. In: Brink TL, editor. Clinical gerontology: a guide to assessment and intervention. New York: Haworth Press; 1986. p. 165-73.
- Mahoney FI, Barthel DW. Functional evaluation: the Barthel index. Md State Med J. 1965 Feb;14:61-5.
- Vanková H, Holmerová I, Andel R, Veleta P, Janecková H. Functional status and depressive symptoms among older adults from residential care facilities in the Czech Republic. Int J Geriatr Psychiatry. 2008 May;23(5):466-71.
- Bowling A, Dieppe P. What is successful ageing and who should define it? BMJ. 2005 Dec 24;331(7531):1548-51.
- 34. Jeste DV, Savla GN, Thompson WK, Vahia IV, Glorioso DK, Martin AS, et al. Association between older age and more successful aging: critical role of resilience and depression. Am J Psychiatry. 2013 Feb 1;170(2):188-96.
- Strawbridge WJ, Wallhagen MI, Cohen RD. Successful aging and wellbeing: self-rated compared with Rowe and Kahn. Gerontologist. 2002 Dec;42(6):727-33.
- Pidrman V, editor. Depression from various frames of reference II. Praha: Galen; 2007. (In Czech.)
- Dragomirecká E, Prajsová J. Manual for users of the Czech version of WHOQOL-OLD questionnaires. Prague: Psychiatric centre Prague; 2009. (In Czech.)

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