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Dignity and attitudes to aging: A cross-sectional study of older adults

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Abstract

Background: Dignity is a multidimensional construct that includes perception, knowledge, and emotions related to competence or respect. Attitudes to aging are a comprehensive personal view of the experience of aging over the course of life, which can be influenced by various factors, such as the levels of health and self-sufficiency and social, psychological, or demographic factors. Aim: The purpose of this study was to explore the attitudes to aging of home-dwelling and inpatient older adults, and whether dignity and other selected factors belong among the predictors influencing attitudes to aging in these two different groups of older adults. Research design: Cross-sectional study using a set of questionnaires: Patient Dignity Inventory, Attitudes to Aging Questionnaire, and Barthel Index. Pearson and Spearman correlation analyses and multivariable linear regression were used for statistical processing. Participants and research context: 233 inpatients and 237 home-dwelling older adults participated in the research in two regions of the Czech Republic. Ethical considerations: Institutional Review Board approval was received from the authors' university. Findings: The inpatients had more negative attitudes to aging (M = 74.9±10.9; P <0.0001). The predictors of their attitudes to aging were gender and dignity. Women (β = −2.969, P = 0.045) and inpatients with poor dignity ratings (β = −0.332, P <0.0001) had more negative attitudes to aging. The predictors for home-dwelling older adults were education, living arrangement, and dignity. More negative attitudes to aging were found in older adults with lower levels of education (β = 2.716, P = 0.007) who lived alone (β = 2.163, P = 0.046) and rated their dignity as low (β = −0.325, P <0.0001). Discussion and Conclusions: The results of this study add to the understanding that a sense of dignity is an important predictor of attitudes to aging for both home-dwelling older adults and inpatients.

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Keywords
areas of practice, attitude to aging, care of the older person, dignity in care, home-dwelling older adult, inpatient, topic areas

Introduction

It has been estimated that 9% of the global population was at least 65 years of age in 2019, with an expected increase to 16% by 2050; meaning one in six people worldwide will be 65 or over.[1] In the Czech Republic, as in other European countries, this trend is accelerating significantly, especially in those aged 80 or over.[2] This rapidly aging population presents a challenge for nursing practice, research, and education because people not only live longer but also experience a relatively longer period of their lives with chronic diseases, geriatric frailty, higher incidence of injuries, and limited self-sufficiency.[3] Attending to the complex needs of elderly patients requires specific knowledge and skills; therefore, nurse research and education should include elements clearly focused on "gerontological nursing" in order to support delivery of high-quality care to older adults.[4]

However, the aging population is very diverse. There are many 80-year-olds with very good physical and mental fitness; in contrast, in older adults there is a significant decrease in physical and mental abilities, deterioration of self-sufficiency, and severe poly-morbidity at a significantly younger age.[5] Awareness of chronic disease and losses, including physical, emotional, and social limitations, may affect attitudes toward aging.[6] A patient's attitude toward aging is an important consideration for nurses as it may shape the persons outlook and behavior.[7]

Attitudes to aging

Individual's attitudes are derived from their direct experiences or observations. Low, Molzahn, and Schopflocher[8] defined them as stable, integrative judgments that summarize a person's thoughts, feelings, and memories of objects or situations. The biological age of an individual is not the only circumstance that shapes these attitudes. Subjective aging encompasses various related concepts that reflect the way individuals experience the aging process.[6] Attitudes toward aging thus represent a comprehensive personal view of the experience of aging over the course of a life. For an older adult, these can impact on the quality of life,[7] satisfaction with one's life,[6] stress response, coping strategies,[9] cognitive functions, for example, verbal fluency and memory,[10] and healthy living behaviors.[11]

The factors influencing attitudes to aging are multiple and include self-rated health, self-sufficiency,[12] living alone,[13] and demographic factors, such as gender and educational attainment level.[13–21] Previous research has suggested that psychological variables can have a greater impact than physical health and sociodemographic characteristics on attitudes to aging.[21,22] These attitudes should be regarded with importance by nursing professionals and should be considered in the process of planning interventions to buffer the detrimental aspects of aging.[13] Indeed, Laidlaw et al.[23] proposed that developing any understanding of the aging process needs to include an exploration of attitudes toward aging from the perspective of older adults themselves. However, although current nursing literature contains research on the attitudes of nurses and nursing students toward older adults,[24,25] studies dealing with the attitudes of older individuals toward their own aging are few.

Dignity

Attitudes toward aging may be linked to notions of dignity. Dignity is a natural quality of man; it can be subjectively perceived as an attribute of one's self and manifests through behavior that demonstrates respect for one another.[26] The World Health Organization defines dignity as "an individual's inherent value and

worth," adding that it is strongly linked to respect, recognition, self-worth, and the possibility of making choices.[27]

In nursing ethics, dignity is one of the basic concepts, with main attributes of personhood (intrinsic), sociability (relational/behavioral), respect, and autonomy.[28] It thus forms a multidimensional construct that includes perception, knowledge, and emotions related to competence or respect.[29] Dignity is a psychological factor that significantly affects the life of an older adult because self-perceived dignity is associated to a significant degree with age and the meaning of life.[30] Thus, it is not only a theoretical concept, but it also has practical significance and is important for older adults.[31]

Perceptions of dignity in old age are associated with both the psychological and social dimensions of a senior citizen's life, whether they be self-sufficient seniors, or frail, non-self-sufficient, and dependent older patients. Loss of dignity generally raises greater concern among older inpatients,[32] and a lack of recognition and social invisibility are a real threat to a person's sense of dignity in old age.[33] Dignity in old age is therefore linked to attitudes toward old age and related concepts such as "positive aging" and "quality of life."[18] Erikson et al.[34] suggested that dignity is important for successful aging. Therefore, measuring dignity against other aspects of older adults' lives, such as attitudes toward aging, could test this statement and offer important insights.

Evaluating older adults' attitudes toward aging and exploring the factors that may influence those attitudes could inform positive contributions to the promotion of dignity. This in turn could have positive benefits for health and quality of life. However, to the best of our knowledge, in Europe, the relationship between attitudes to aging and subjective assessments of dignity by older adults has been the subject of limited research. Only one study (also from the authors of this paper) was found which examined attitudes toward aging and quality of life in Czech community-dwelling older adults. The study results suggested that dignity was a predictor of older peoples' attitudes toward aging in the area of Psychological losses.[18]

Therefore, this study investigated differences in attitudes to aging of home-dwelling and inpatient older adults, and whether dignity and other selected factors belong to the predictors of attitudes to aging in these two groups of older adults.

Methods

Study design

The study was quantitative cross-sectional utilizing a questionnaire battery. The research was carried out as partial part of a longitudinal study aimed at changing perceptions of dignity (registered prior to the enrollment of the first patient at www.clinicaltrials.gov). The study variables were the scores obtained from questionnaires administered to home-dwelling and inpatient older adults, and the socio-demographic characteristics of the sample.

Ethical considerations

The study protocol was approved by the Ethics Committee of the Faculty of Health Sciences at Palacký University Olomouc in the Czech Republic (UPOL-615/1040-2019) and data were collected according to ethical principles with informed consent, confidentiality, and the right to withdraw from participation at any time without presenting a reason.

Participants

The sample included two groups of older people. The first group comprised home-dwelling older adults who subjectively evaluated their health as being good (category determined according to Laidlaw et al.[23]).

The inclusion criteria for this group of respondents were: a) ≥ 65 years of age; b) living in their own social environment; c) perceived themselves as "healthy"; and d) self-sufficient or only slightly dependent on others for activities of daily living (ADL). The second group consisted of older people hospitalized in a geriatric wards (inpatients) meeting the following criteria: a) ≥ 65 years of age; b) hospitalization for an aggravated chronic disease or severe frailty; and c) hospitalization for a period of at least 1 week. Individuals in a terminal phase of a disease, and/or with severe cognitive, visual or auditory deficits were excluded.

The sample size calculation was based on an expected 0.5-point difference in the Attitudes to Aging Questionnaire (AAQ) score between the home-dwelling and inpatient older adults, with an expected standard deviation of 1.86. Pre-study calculations showed a minimum of 220 people from each group was needed to reach a significant difference with an α-value of 0.05 (two-tailed) and a β-value of 0.80. Assuming 30% incomplete questionnaires, a total of 580 older adults were screened (290 home-dwelling and 290 inpatients). As a result, the final sample included 470 participants who completed the questionnaire file.

Instruments

Attitudes to Aging Questionnaire (AAQ): The AAQ is a widely known psychometrically robust tool to measure attitudes toward aging. This tool is specifically designed for use with older people. The AAQ uses two different formats to gain an experiential and general approach to the perception of aging and individual attitudes toward aging. The first part contains a personal experience component and the second part examines general attitudes. This approach contributes to the potential effectiveness of the questionnaire.[35] The AAQ is a 24-item scale with three domains that examines different aspects of aging, as follows: Psychosocial Loss (experiences of solitude, social exclusion, and a gradual loss of physical self-sufficiency), Physical Change (physical health, fitness, exercise, and overall reflection of aging), and Psychological Growth (positive experience and a positive attitude toward oneself and the outside world). All items are based on self-reporting with ratings ranging from 1 (reflecting strong disagreement or not at all true) to 5 (reflecting strong agreement or completely true). The score for each domain ranges from eight to 40 points. Higher scores indicate a more positive attitude to aging.[23] The AAQ was validated for older people in 20 countries worldwide including the Czech Republic. The internal consistency coefficient (0.74–0.81) for the individual domains was very good.[23]

Patient Dignity Inventory (PDI): This tool can be used to identify a wide range of problems that may cause concern in an individual about a threat or loss of dignity. The PDI is a self-evaluation screening tool developed on the basis of the Chochinov Model of Dignity.[36] Although originally intended for terminally ill oncological patients, the PDI can also be used with older people.[18,37] The PDI is a 25-item questionnaire that gives patients the opportunity to indicate to what extent these items affect their sense of dignity. Each item is based on a five-point Likert scale (1 = not a problem and 5 = an overwhelming problem). The PDI scores range from 25 to 125 points. The intensity indicates how dignity is perceived by the respondent as a problem or cause for concern in relation to a threat to perceived dignity.[36] In our study, we used a validated Czech version (PDI-CZ), in which the items are divided into four subscales: loss of purpose of life; loss of autonomy; loss of confidence, and loss of social support.[20] Seniors were also included in the validation of the PDI-CZ. The internal consistency coefficient for the PDI-CZ (Cronbach's alpha = 0.92) was high.[20]

Barthel Index (BI): The BI is the most common measure of an individual's ability to perform ADLs using a self-report or proxy. This tool contains 10 items. Each item is scored 0, 5, 10, or 15 points depending on whether the person does not perform the activity, or performs it with or without assistance. The total BI score is 0–100 and it determines the degree of the patient's self-sufficiency. A threshold score of 65 indicating the need for ADL assistance.[38] The structural validity, reliability, and interpretability of the BI are considered sufficient for measuring and interpreting changes in physical function of geriatric patients.[39]

Sociodemographic questionnaire: We collected the following variables during a standardized interview: age (categorized as the year of birth); gender (categorized as "male," "female"); living arrangement (who the

older adult lives with: categorized as "alone" or "with others"); and education (categorized as "elementary," "vocational," "secondary," and "tertiary").

Data collection

The data were collected in two regions of the Czech Republic. Home-dwelling older adults were recruited from general practitioners lists and inpatients were recruited from two geriatric wards at the University Hospital after the research team had consulted with the doctors about recruiting to the study. For the purpose of this study, a home-dwelling older adult was defined as independent or slightly dependent on other individuals for ADL (BI score of 65–100 points), subjectively perceived his or her health as good, and not receiving home care services. The second group consisted of inpatient older adults, defined as those hospitalized in a geriatric ward because of a serious and worsening chronic disease or severe frailty.

Home-dwelling older adults who arrived at their general practitioner's office for preventive health check-up and met the inclusion criteria were enrolled in the study. Potential participants were informed about the study design and the battery of questionnaires, offered an opportunity to ask questions, and then if willing to take part were asked to give written consent. In the same way, inpatient older adults were given information about the study and gave consent.

The author of the manuscript is a researcher involved in a longitudinal study on dignity and has experience with the instruments used in this study; she trained research nurses who involved in the administration of the questionnaires. These nurses described the study to and explained how to complete the questionnaires to both home-dwelling and inpatient participant groups. The participants had the opportunity to complete the tools individually or as a structured interview with the research nurse.

Data analysis

Quantitative variables are represented as the mean and standard deviation. Categorical variables are represented as frequencies and percentages. Pearson's correlation coefficient was used to analyze the correlation of age with the BI, PDI-CZ, and AAQ scales. The correlation between the AAQ (the dependent variable) and the ordinal scale (education) was established using Spearman's correlation analysis. The differences between two independent groups (men and women) were analyzed by independent samples t-tests. We used multivariable linear regression to select the potential indicators of the AAQ. In addition to dignity, other variables have been included in the model (age, gender, education, living arrangement, and ADL self-sufficiency) because previous studies suggested that these variables are the factors influencing the attitude to aging.[13–21]

Before the analysis, we performed regression diagnostics (linearity, no multicollinearity, homogeneity, and the normality and independence of residuals). A scatter plot of the standardized residuals versus the predicted values was generated to check the homoscedasticity of variance. Normality was checked using the Shapiro–Wilk test. The independence of the residuals was checked using the Durbin–Watson test, with a value of 2.0 indicating no autocorrelation detected in the sample. Multicollinearity was checked by the variance inflation factor (VIF), with VIF >5 indicating the possibility of multicollinearity among the independent variables. The data in our study met the assumptions of multivariable linear regression. The statistical significance was set at $P < 0.05$ for all tests.

Results

Participant characteristics

The sample included 470 participants who completed the questionnaire battery; 237 home-dwelling [M_{age} = 74.9±6.4 years; 69 males (29.1%)] and 233 inpatient older adults [M_{age} = 80.7±7.0 years; 54 males (23.2%)].

The home-dwelling and inpatient participants differed with respect to age, education, self-sufficiency, assessment of dignity, and attitudes to aging. Compared to those home-dwelling groups, the inpatients were significantly older and had lower levels of education and self-sufficiency and worse ratings for dignity (all $P < 0.0001$). They also had more negative attitudes to aging, with lower total AAQ scores (74.9±10.9, $P < 0.0001$) and lower ratings in the domains of Psychosocial Loss (24.5±5.6, $P < 0.0001$) and Physical Change (23.1±5.1, $P = 0.008$). In the Psychological Growth domain, the differences between the home-dwelling participants and inpatients were not confirmed ($P = 0.711$) (Table 1).

Factors influencing attitudes toward aging

For the group of home-dwelling older adults, the age correlated with the total AAQ score ($r = -0.181$, $P < 0.01$) and the Psychosocial Loss domain ($r = -0.232$, $P < 0.001$). With older age, attitudes toward aging worsened. Education correlated with the total AAQ score ($r = 0.133$, $P < 0.05$). Older adults with higher levels of education had more positive attitudes to aging. The living arrangement (with whom the senior lives) correlated with the total AAQ score and the Psychosocial Loss and Psychological Growth domains. Older adults who lived alone had significantly more negative reviews [AAQ score (M = 76.31±9.70 vs. 80.02±9.01, $P = 0.005$), Psychosocial Loss (M = 26.15±4.67 vs. 27.83±4.54, $P = 0.011$), and Psychological Growth (M = 26.25±4.06 vs. 27.95±3.81, $P = 0.002$)]. More self-sufficient older adults had more positive attitudes toward aging ($r = 0.471$, $P < 0.001$ for the total score for AAQ), and significant correlations were also demonstrated for all the AAQ domains. Dignity correlated significantly with the total AAQ score ($r = -0.565$, $P < 0.001$), as well as all the AAQ domains. Older adults who rated their dignity better had more positive attitudes toward aging (Table 2).

For the group of older adult inpatients, dignity was the only factor that affected both the overall AAQ score ($r = -0.485$, $P < 0.001$) and all the AAQ domains. Inpatients with a lower PDI-CZ score (a better dignity rating) had more positive attitudes to aging. The overall AAQ score ($r = 0.161$, $P < 0.05$) and the domains of

Table 1. Participant characteristics.

			Group 1	Group 2	*p*-value
Characteristic	Categories	Total sample	*N* = 470; 100%	*N* = 237; 50.4%	*N* = 233; 49.6%
Age (mean; SD)		77.8; 7.3	74.9; 6.4	80.7; 7.0	<0.0001†
Gender, N (%)	Male	123 (26.2)	69 (29.1)	54 (23.2)	0.143‡
	Female	347 (73.8)	168 (70.9)	179 (76.8)	
Education, N (%)	Elementary	102 (21.7)	35 (14.8)	67 (28.8)	<0.0001‡
	Vocational	147 (31.3)	76 (32.1)	71 (30.5)	
	Secondary	180 (38.3)	110 (46.4)	70 (30.0)	
	Tertiary	41 (8.7)	16 (6.8)	25 (10.7)	
Living arrangement	Alone	157 (33.4)	71 (30.0)	86 (36.9)	0.110‡
N (%)	With others	313 (66.6)	166 (70.0)	147 (63.1)	
BI (mean; SD)	—	77.9; 23.8	96.5; 6.7	59.0; 19.7	<0.0001†
PDI-CZ total score (mean; SD)	—	43.9; 16.9	35.2; 12.7	52.8; 16.0	<0.0001†
AAQ total score (mean; SD)	—	76.9; 10.3	78.9; 9.4	74.9; 10.9	<0.0001†
Domains	Psychosocial loss	25.9; 5.3	27.3; 4.6	24.5; 5.6	<0.0001†
	Physical change	23.61; 4.4	24.2; 3.6	23.1; 5.1	0.008†
	Psychological growth	27.4; 4.2	27.4; 4.0	27.3; 4.4	0.711†

Group 1 = home-dwelling older adults; Group 2 = inpatients; † independent samples t-test; ‡ chi-squared test.

Table 2. Relationship between the AAQ and related factors.

	Group 1 AAQ (domains; total score)				Group 2 AAQ (domains; total score)			
Variable	PL	PC	PG	TS	PL	PC	PG	TS
Age†	−0.232***	−0.084	−0.081	−0.181**	−0.149*	−0.112	0.006	−0.126
Gender‡	0.888	0.727	0.692	0.986	0.751	0.007**	0.972	0.279
Education§	0.105	0.118	0.084	0.133*	0.134*	0.149*	0.085	0.161*
Living arrangement‡	0.011*	0.491	0.002**	0.005**	0.383	0.787	0.363	0.491
Self-sufficiency†	0.447***	0.388***	0.239***	0.471***	0.122	−0.007	−0.078	0.028
Dignity†	−0.540***	−0.408***	−0.336***	−0.565***	−0.541***	−0.189**	−0.294***	−0.485***

Group 1 = home-dwelling older adults; Group 2 = inpatients; PL = Psychosocial Loss; PC = Physical Change; PG = Psychological Growth; TS = AAQ total score; † Pearson's correlation coefficient; ‡ independent samples t-test (p-value); § Spearman's correlation coefficient; * $p<0.05$; ** $p<0.01$; *** $p<0.001$.

Psychosocial Loss and Physical Change correlated with education. Inpatients with higher levels of education had more positive attitudes to aging. The difference between men and women was in the Physical Change domain alone. The men had higher values (more positive attitude) than the women (M = 24.70±4.96 vs. M = 22.58±5.01, $P = 0.007$). Age correlated only with Psychosocial Loss ($r = -0.149$, $P < 0.05$), with attitudes to aging deteriorating with greater age (Table 2).

A multivariate linear regression model included the following variables: age; gender; education; living arrangement; ADL self-sufficiency; and dignity (Table 3). The models explained 53%–64% of the variability, depending on the variables. The explained variability of the dependent variable was the better model for home-dwelling older adults ($R^2 = 0.640$).

The predictors of attitudes to aging in the home-dwelling older adults were education, living arrangement, and dignity. Older adults with higher levels of education had more positive attitudes to aging ($\beta = 2.716$, $P = 0.007$), as did those who did not live alone ($\beta = 2.163$, $P = 0.046$) and rated their dignity better ($\beta = -0.325$, $P < 0.0001$).

For the inpatients, only gender and dignity were predictors of attitudes to aging. The women had more negative attitudes to aging ($\beta = -2.969$, $P = 0.045$), as did inpatients with a worse assessment of their dignity ($\beta = -0.332$, $P < 0.0001$).

Discussion

The purpose of this study was to determine how attitudes to aging differ in home-dwelling and inpatient older adults, and whether dignity ranks among the predictors of attitudes to aging in these two groups. In our study, the inpatients had a more negative rating in both the overall AAQ score and the Psychosocial Loss and Physical Change domains, indicating a link between attitudes to aging and impaired physical health.

Bryant et al.[40] have previously confirmed that more positive reviews in the Psychosocial Loss and Physical Change domains are associated with better physical health. Thorpe et al.[22] also state that most of the chronic conditions that they examined are significantly linked to attitudes toward aging in the area of physical changes. The relationship between health and attitudes to aging is complex. Even older adults with health problems can still feel positive about their own aging.[41] This corresponds to our finding that the inpatient and home-dwelling older adults were not different in the Psychological Growth domain. This domain is focused on the positive aspects of wisdom and generativity that adults can feel as they grow older. Therefore, the domain of Psychological Growth may be less affected by physical changes than the other AAQ domains.[21]

Table 3. Predictors of attitudes to aging.

	Group 1			Group 2		
	AAQ (total score)			AAQ (total score)		
Variable	Beta (95% CI)	Standard beta	*p*-value	Beta (95% CI)	Standard beta	*p*-value
Age	−0.097 (−0.263–0.068)	−0.067	0.248	0.011 (−0.173–0.195)	0.007	0.909
Gender	0.096 (−2.029–2.222)	0.005	0.929	−2.969 (−5.870–−0.069)	−0.116	0.045*
Education	2.716 (0.743–4.690)	0.145	0.007**	−0.124 (−2.669–2.421)	−0.006	0.923
Living arrangement	2.163 (0.039–4.286)	0.106	0.046*	0.358 (−2.195–2.913)	0.016	0.783
Self-sufficiency	0.172 (−0.023–0.368)	0.124	0.083	−0.073 (−0.140–0.006)	−0.132	0.053
Dignity	−0.325 (−0.415–−0.235)	−0.439	<0.0001***	−0.332 (−0.412–−0.253)	−0.489	<0.0001***
$R2/R^2$ adj	0.640/0.410			0.529/0.280		
D-W test/VIF	1.846/1.340			2.040/1.118		

Group 1 = home-dwelling older adults; Group 2 = inpatients; D-W test = Durbin–Watson test; VIF = variance inflation factor; * $p<0.05$; ** $p<0.01$; *** $p<0.001$.

In our study, the only factor which influenced attitudes to aging in all the AAQ domains, both for self-sufficient home-dwelling and inpatient older adults, was dignity. In another Czech study, dignity was also confirmed to be a predictor of attitudes to aging among elderly people in the early stages of dementia.[18] Dignity is a complex factor that includes both individual and social dimensions. In the Czech version of the PDI questionnaire (PDI-CZ),[20] sources of distress related to threats to one's dignity or its loss are divided into four subscales of experienced losses. The individual dimensions are represented by loss of purpose, loss of autonomy, and loss of confidence. The social dimension is represented by a loss of social support subscale. Older people often experience suffering as a result of body fatigue and social causes, which affects the way people experience their own life situation.[42] Our study showed that the more the endangered older adults assess their dignity to be (on the basis of the subjective perception of experienced losses), the more negative their attitudes toward old age will be.

The correlation between the overall AAQ and PDI-CZ scores was demonstrated for the groups of home-dwelling and inpatient older people, which shows that dignity is a significantly complex factor that can influence attitudes to aging across the heterogeneous elderly population. Within individual domains, a stronger correlation between the AAQ and PDI-CZ scores was demonstrated exclusively in the Physical Change domain in home-dwelling older adults. We believe that this finding may be due to the fact that inpatient older adult with severe chronic diseases are often already adapting to the physical changes and functional decline caused by a worsening medical condition. They may perceive this as a natural consequence of aging and disease and thus show more resilience, unlike self-sufficient older people.[43]

More highly educated people usually have more resources to help them adapt to age-related problems. Therefore, they can maintain positive attitudes toward their own aging. In the study of Gale and Cooper,[17] who used an abbreviated version of the AAQ questionnaire, the authors also reported that more negative attitudes are associated with lower educational attainment. This corresponds to our finding that participants with higher levels of education had more positive attitudes to aging (the total AAQ score).

Regarding living arrangements, the home-dwelling older adults living alone had worse scores in the Psychosocial Loss and Psychological Growth domains and for their overall AAQ score. This finding may be related to the fact that people over 65 years of age who live alone are more likely to be women and often face more demanding aging-related situations. Kalfoss[13] described that within the Psychosocial Loss domain, both older men and women often reported feeling excluded from various activities because of their age. It is also more difficult for older people to find new partners among peers and make new friendships.

The only predictor that influenced attitudes to aging in the inpatients was gender, with women having more negative attitudes to aging than the men. The differing results between men and women may be due to the fact that women need special support when seeking physical activity that they can handle because they have lower self-efficacy in their ability to maintain physical activity levels.[44] Kalfos[13] also stated that women have more negative attitudes to aging. This may be due to women living longer than men, being more likely to live without a partner, and suffer from more chronic diseases over a longer period of time and therefore are more likely to need institutional care. In contrast, Kozar-Westman et al.[45] demonstrated in their study that females have a higher tendency to successful aging. This finding may be related to different gender patterns of behavior across cultures. According to studies of Middle Eastern cultures, there are differences between men and women across all domains and in terms of overall AAQ scores.[35] Gender may play a more important role in these patterns owing to cultural traditions and norms in caring responsibilities; however, whether gender plays a greater role in Asia than in the West remains a matter for further research.[46] According to another study, gender does not affect the attitudes to aging of New Zealanders.[22] This result may be due to the age of the respondents. The participants in our study were 65 years of age or older, whereas in the New Zealand study,[22] the respondents were 49–51 years of age and had a predominantly optimistic attitude toward aging.

To our knowledge, this is the first study to show that dignity is an important predictor of attitudes to aging in two different groups of older adults. There are some limitations to this research. First, the participants were recruited from two Czech regions and are not a random sample. Thus, the findings may not be generalizable to the entire older population; however, we would hope that the detail given would enable some transferability of main principles and act as a starting point for others. It is also possible that there were some biases in the completion of the questionnaires, for example, social acceptability may have influenced answers especially if the questionnaires were completed as structured interviews. Second, other variables that were not included in the study, such as the extent and quality of social relationships or economic status, may have influenced the results. However, the predictive capacity of the model is high which we feel indicates its usefulness for future research, education, and practice.

Conclusion

The main finding of this study was that dignity is a common predictor of attitudes to aging in self-sufficient older adults living at home as well as in inpatients in geriatric wards. The results also showed that in the home-dwelling older adults, education and living arrangement were other predictors. The older adults with higher levels of education and not living alone had more positive attitudes to aging. In contrast, for the inpatients, only gender was another predictor beyond dignity. A future study should consider using a longitudinal design to understand the impact of dignity as a comprehensive factor in shaping the attitudes to aging of older people.

Implications for clinical practice

The results of the study have implications for both nurse education and clinical practice. Raising the awareness of nurses to the links between dignity and attitudes to aging could help increase understandings of

the importance of attending to dignity and in turn how that may enhance the health and quality of life of our seniors. The results of this study could be used as a basis for developing both educational initiatives and practice nursing interventions focused on both clinical inpatient and home care settings with the overall aim of promoting and protecting the dignity of older adults and positively influencing their attitudes toward aging.

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Declaration of Conflicting Interests

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