

International Journal of Gerontology

journal homepage: http://www.sgecm.org.tw/ijge/

Original Article

Analysis of Students Approaches and Attitudes towards Ageing and the Elderly

Ayegül Türkylmaz^{a*}, Bülent Öngören^b, İshak Aydemir^c

^a Department of Nutrition and Dietetics, Faculty of Health Sciences, Muğla Sıtkı Koçman University, Muğla, Turkey, ^b Deparment of Social Work, Seydikemer Applied Sciences School, Muğla Sıtkı Koçman University, Muğla, Turkey, ^c Deparment of Social Work, Gulhane Faculty of Health Sciences, University of Health Sciences, Ankara, Turkey

ARTICLEINFO SUMMARY Accepted 18 June 2024 Background: The approaches of young individuals towards elderly individuals differ from society to society and also from person to person. The increasing life expectancy due to the increase in the ageing Kevwords: population in Turkey has caused more frequent contact between nutrition and dietetics specialists and ageing, elderly individuals. Therefore, one of the most basic health needs is to ensure that the diets of elderly elderly, individuals are applied correctly, to follow their diets and to make positive changes in their eating beattitude. haviours. students, Methods: The population of this study was composed of students attending the Nutrition and Dietetics. Descriptive analyses were used for the participants' past life experiences. Parametric and non-paranutrition metric analyses were conducted to compare the participants' past life experiences. Results: The ages of the nutrition and dietetics students participating in this study were between 18 and 23 years (mean age: 20.45), and 88.8% of them were female. A significant correlation was found between the grade level of the students (first to fourth grade), the environment where they live, their income status, their attitudes towards elderly individuals and their attitudes towards elderliness. No significant correlation was found between the students' attitudes towards elderly people and elderliness and the number of their siblings, the current marital status of their parents, the person(s) they live with and any chronic disease in the family. Conclusion: The students had positive attitudes towards elderly people and elderliness, and some sociodemographic variables affected their attitudes towards elderly individuals and elderliness. Copyright © 2024, Taiwan Society of Geriatric Emergency & Critical Care Medicine.

1. Introduction

At the biological level, ageing is characterised by the widespread deterioration of body functions as a result of gradual and lifelong molecular and cellular damage, weakness of the body against changing environmental conditions and an increased risk of death due to diseases.¹ Ageing is accepted in natural life, and it is not only the progression of age but also a dynamic process in which different processes are effective in gaining experience and being healthy or functional.² Since the Age of Enlightenment, life expectancy has increased rapidly, reaching over 70 years today. The proportion of the elderly population in the world is estimated to increase from 9.3% in 2020 to 16% in 2050, and by then, there will be more than 1.5 billion elderly people. In comparing the population pyramids of Turkey in 2007 and 2020, the elderly population increased, and the median age ratio increased because of the decrease in fertility and mortality rates.³

In a study on diseases in elderly individuals published by the WHO in 2013, emotional disorders ranked first among the diseases encountered by people aged 65 and above (especially those in lowand middle-income countries). In addition, neck pain (especially in low-income countries), chronic obstructive pulmonary disease, depression, falls, diabetes (especially in high-income countries), dementia and osteoarthritis were the diseases with the highest loss of function.⁴

The geriatric population should be considered a special group in terms of health services.⁵ This group, whose health services often require a high level of care, feel the need for a more complex medical treatment, proper nutrition and proper diet because of their chronic health problems.⁶ There is a close relationship between chronic diseases and special nutritional problems in old age. Nutritional problems may occur as health problems on their own, or they may be one of the most important factors underlying chronic diseases. In this period, as in other age groups, problems related to malnutrition and obesity are experienced.⁷ Healthcare professionals should be prepared for the changes and developments that may result from the demographic changes brought about by the increasing proportion of the elderly population in the total population.^{8,9} Accordingly, healthcare professionals are expected to show a more professional and more constructive approach towards older individuals, considering that they may be more fragile and more sensitive. $^{10,11}\ \mathrm{As}$ the population of elderly individuals continues to increase, so does the demand for nutritional counselling and interventions for this age group. The positive attitudes of these students towards elderly individuals will both increase their self-confidence and the likelihood of

^{*} Corresponding author. Department of Nutrition and Dietetics, Faculty of Health Sciences, Muğla Sıtkı Koçman University, Muğla, Turkey.

E-mail address: aysegulturkyilmaz@mu.edu.tr (A. Türkylmaz)

success in interventions.^{12,13} In addition, health personnel serving elderly individuals should be knowledgeable and willing about geriatrics to offer better services. Good communication with elderly individuals increases confidence on the part of patients. The ability to empathise and appreciate every positive development is indispensable for a dietician to improve patients' condition. Conversely, negative attitudes and prejudices create negativity in elderly care.¹⁴

According to the literature, factors such as age, gender, ethnicity, living with elderly people and geriatric education affect the attitudes of healthcare professionals towards elderly individuals.^{13–15} The approaches of young individuals towards elderly individuals differ from society to society and from person to person. The increasing life expectancy due to the increase in the ageing population in Turkey has caused more frequent contact between nutrition and dietetics specialists and elderly individuals.⁷ For this reason, the aim of our research is to analyze the attitudes of nutrition and dietetics students towards the elderly and their own old age in order to ensure the correct implementation of the diets of elderly individuals and to make positive changes in their eating behaviors. Therefore, the aim of our research is to analyze the attitudes of nutrition and dietetics students towards the elderly and their own old age, and to examine the effect of their attitudes towards the elderly on their attitudes towards their own old age, in order to ensure the correct implementation of the diets of elderly individuals and to make positive changes in their eating behaviors. Hypotheses created for the purpose of the research:

- H1. Participants' attitudes towards the elderly vary according to their demographic characteristics (gender, class, place of residence, income, number of siblings, parents' togetherness and chronic disease status).
- H2. Participants' attitudes towards their own old age vary according to their demographic characteristics.
- H3. There is a relationship between the participants' attitudes towards the elderly and their own old age.

2. Methods

The population of this study was composed of students attending the Department of Nutrition and Dietetics at the Faculty of Health Sciences in University. A purposive sampling method was used in the selection of the participants. The upper limit for the sample size was 330 students. A total of 268 volunteer students were recruited. The study was conducted between October 2020 and January 2021.

Data were collected using the UCLA Geriatrics Attitude Scale (UCLA-GAS), a socio-demographic information form and the Scale of Attitudes towards Elderliness and Ageing (SAEA). The socio-demographic information form was used to collect the socio-demographic data of the students, the duration of their encounter with elderly individuals and the process in which they were together. The Turkish version of the UCLA-GAS is also included in the Turkey Measurement Tools Index, thus making it an open-access tool. Consent was obtained from the author of the SAEA for use.

2.1. Data collection tools

2.1.1. Questionnaire 1: UCLA-GAS

The UCLA-GAS was developed by Reuben et al. (1998; University of California, Los Angeles Geriatric Attitude Scale) to evaluate the attitudes of healthcare professionals towards older adults.¹⁶ This scale includes negative and positive 14 items designed on a fivepoint Likert scale. The scale has four dimensions: social values, medical care, compassion and resource distribution. The scores of the UCLA-GAS range from 14 to 70. Higher scores indicate more positive attitudes towards older adults. The UCLA-GAS was evaluated on elderly individuals in Turkey by Şahin S. et al.¹⁷

2.1.2. Questionnaire 2: Socio-demographic information form

The form developed by the researchers considering the related literature, such as Mandıracıoğlu and $Chen^{6,11}$ aims to determine the students' socio-demographic characteristics, their encounter with elderly individuals and the process in which they were together with them. The form consists of 19 items. No open-ended items are included in the form.

2.1.3. Questionnaire 3: SAEA

The Attitude Scale towards Ageing and Old Age consists of 45 items and has a five-point Likert structure. A high score for each factor indicates that the feature considered in this factor is high. Therefore, the high score obtained from the difficulty in accepting old age sub-dimension indicates that the respondent has a high difficulty in accepting old age; a high score in the social burnout perception sub-dimension increases the perception of social burnout; The high score obtained from the elderly cannot cope with the necessities of life; The high score obtained from the negative image sub-dimension indicates that the negativity attributed to the elderly image has increased.¹⁸

2.2. Data analysis

To test the reliability of the scale used in the study, Cronbach's alpha internal consistency coefficients were calculated. Descriptive analyses (frequency, percentage, mean and standard deviation) were used for the participants' experiences. In the comparison of the participants' experiences, parametric (independent samples t-test and analysis of variance) and non-parametric (chi-square and Mann-Whitney U) analyses were used.

2.3. Ethical dimension of the study

Ethical approval (200007-26.09.2020) from the ethics committee of Muğla Sıtkı Koçman University and official permission from the institution where the study was conducted were obtained to perform the study. All participants were informed about the study, and their consent was obtained.

3. Results

The nutrition and dietetics students who participated in this study were in the age group of 18–23 years old (mean age: 20.45 years); 88.8% of them were female; 63.6% had 1–3 siblings; and the majority of their parents (85.8%) lived together. More than half of the students (54.8%) lived in cities, and their income levels ranged from the minimum wage to four times the minimum wage. The majority of the students lived with their families, and 34% had a chronic disease or one of their family members (Table 1).

In the t test conducted according to gender, a significant difference was determined in the UCLA-GAS, but no significant difference was detected in the SAEA scale. As a result of the research conducted according to gender, it is seen that H1 is accepted and H2 is rejected. When the group averages are examined, it can be said that female students exhibit more positive attitudes towards the elderly, as the average UCLA-GAS scores regarding the attitudes of female participants towards elderly individuals are higher than those of males (Table 1). There were differences according to students' grade levels (from first grade to fourth grade) at UCLA-GAS and SAEA. H1 and H2 of the research were accepted according to the grade level. According to the post-hoc Tukey test, there is a difference between first and third grade students (p < .05). It can be said that while first-year students exhibit more positive attitudes towards elderly individuals, they exhibit more negative attitudes towards their own old age (Table 1). While a significant difference was determined in the UCLA-GAS according to where the students lived, no significant difference could be detected in the SAEA scale. Depending on the place of residence, H1 of the study was accepted and H2 was rejected. According to the post-hoc Tukey test, there is a difference between places of residence (p < .05). It can be said that those living in villages have more positive attitudes towards the elderly than those living in cities and metropolitan cities, and those living in towns have more positive attitudes towards the elderly than those living in cities (Table 1).

There was a difference in UCLA-GAS and SAEA according to income, and it was determined that the difference was between the upper income group and the lower and middle income group. H1 and H2 were accepted according to income. When the averages of income groups are examined, it can be said that as income increases in UCLA-GAS, negative attitudes towards the elderly increase, while in SAEA, as income increases, attitudes towards own old age become more negative. In the study, no significant difference was detected in UCLA-GAS and SAEA according to the number of siblings, parents' togetherness and chronic disease status, thus H1 and H2 hypotheses were rejected. When the effect of UCLA-GAS on SAEA is examined, according to the F test results at the 5% significance level (F: 103.013, p: 0.000), the model is generally significant and the coefficients are less than 0.05 because the p values of the fixed coefficient and the independent variable are less than 0.05. It can be said that it is statistically significant. UCLA-GAS explains SAEA at 28% (R2 = 0.279). Accordingly, it can be said that UCLA-GAS has a significant impact on SAEA, and as individuals' positive attitudes towards the elderly increase, their negative attitudes towards their own old age decrease. It can be stated that a one-unit increase in positive attitudes towards the elderly reduces individuals' negative attitudes towards their own old age by -2.825, and accordingly, the 3rd hypothesis of the research was accepted (Table 2).

In our study, no significant difference was detected in UCLA-GAS and SAEA in the tests performed according to the number of siblings, marital status of parents, individuals living together and chronic disease (Table 1). Therefore, according to these, hypotheses H1 and H2 were rejected.

3.1. Limitations of the study

This study has several limitations. The first limitation is that the data used in the study is related to only two universities in Turkey, and the study findings represent students studying only in these two

Table 1

Distribution of the total scores of the students regarding elderly individuals and elderliness across their socio-demographic characteristics.

	n	%	UCLA		SAEA	
			Mean (SD)	р	Mean (SD)	р
Sex				0.042*		0.084
Female	238	88.8	50.13 (5.9)		124.52 (33.82)	
Male	30	11.2	46.67 (8.7)		135.93 (35.13)	
Grade level attended				0.032* (1-3)		0.023* (1, 3)
1 st Grade	75	28.0	51.26 (6.59)		117.43 (32.74)	
2 nd Grade	35	13.1	49.31 (5.74)		119.77 (35.14)	
3 rd Grade	84	31.3	48.32 (5.94)		131.56 (29.78)	
4 th Grade	74	27.6	50.03 (6.65)		130.58 (34.09)	
Place of residence	0.001*		0.158			
1. Village	22	8.2	53.223 (4.56)	0.001*	117.18 (31.44)	
2. Town	99	36.9	51.00 (5.35)	(1-3)	125.24 (31.83)	
3. City	47	17.5	46.73 (6.94)	(1-4)	135.042 (37.31)	
4. Metropolis	100	37.3	49.16 (6.75)	(2-3)	123.89 (34.85)	
Income level				0.000*		
1. Minimum wage and lower	61	22.8	50.61 (6.81)	0.009*	122.401 (34.27)	0.000*
2. Between minimum wage and two times the minimum wage	101	37.7	50.27 (5.94)	(1-4)	119.60 (34.43)	0.006*
3. Between two and four times the minimum wage	84	31.3	49.60 (5.93)	(2-4)	130.90 (31.39)	(4, 3, 2, 1)
4. More than four times the minimum wage	22	8.2	45.55 (7.44)	(3-4)	144.09 (34.80)	
Totally	268	100				

p < .10 (Tukey test was used as Anova Posthoc test).

Table 2

Regression analysis results on UCLA's impact on SAEA.

Dependent variable				SAEA				
Unstandardized coef		fficients Signi		R ²	Corrected R ²	F	Anova-Sig	
В	Beta	t	Sig.					
266.351		19.078	.000	.279	.276	103.013	.000	
-2.825	528	-10.150	.000					
ition based on unstai	ndardized regressio	n coefficients	SAEA = 266.35	51 – 2.825 UCLA	_GAS			
ized coefficients, Bet	a = Standardized co	efficients.						
	Unstandardize B 266.351 -2.825 tion based on unsta	Unstandardized coefficients B Beta 266.351 -2.825528 tion based on unstandardized regressio	Unstandardized coefficientsSignBBetat266.35119.078	Unstandardized coefficientsSignificantBBetat266.35119.078.000-2.825528-10.150.000tion based on unstandardized regression coefficientsSAEA = 266.35	Unstandardized coefficientsSignificantR2BBetatSig.266.35119.078.000.279-2.825528-10.150.000tion based on unstandardized regression coefficientsSAEA = 266.351 - 2.825 UCLA	$\begin{tabular}{ c c c c c c } \hline Unstandardized coefficients & Significant & R^2 & Corrected R^2 \\ \hline B & Beta & t & Sig. \\ \hline 266.351 & 19.078 & .000 & .279 & .276 \\ \hline -2.825 &528 & -10.150 & .000 \\ \hline tion based on unstandardized regression coefficients & SAEA = 266.351 - 2.825 UCLA_GAS \\ \hline \end{tabular}$	Unstandardized coefficientsSignificantR2Corrected R2FBBetatSig.266.35119.078.000.279.276103.013-2.825528-10.150.000.000.000tion based on unstandardized regression coefficientsSAEA = 266.351 - 2.825 UCLA_GAS	

* p \leq 0.05.

F = The F value is used in analysis of variance (ANOVA), R² = Regression.

universities. The second limitation of the study is the evaluation of ageing and their attitudes towards the elderly, of Nutrition and Dietetics Department students studying at these universities (Muğla Sıtkı Koçman University and Aydın University). However, despite all these limitations, this study reflects the results of two different universities with different locations (city and metropolis) and different characteristics (foundation and public) and similar studies. It is important for the results to be close to each other.

4. Discussion

The aim of our study is to examine the attitudes of nutrition and dietetics students, who will provide health services to elderly individuals, towards the elderly and their own old age, according to sociodemographic characteristics, and to examine the attitudes of young people towards the elderly and their attitudes towards their own old age. It can be stated that the participants in the study generally exhibited positive attitudes towards elderly individuals.

Previous studies have reported that attitudes towards the elderly do not differ by gender.^{18–20} On the contrary, there are some studies.^{5,19,27} In our study, it is seen that female students have more positive attitudes towards elderly individuals. It is thought that the reason for this situation is that women in our country are socialized to be responsible for child and elderly care. On the other hand, no difference was found in students' attitudes towards their own old age (SAEA) according to gender and our hypothesis H2 was partially rejected.

In this study, a significant relationship was found between students' grade levels and their attitudes towards elderly individuals. While 1st grade students exhibit more positive attitudes towards older individuals and a more negative attitude towards their own old age, 3rd grade students exhibit more negative attitudes towards older individuals and a more positive attitude towards their own old age. This situation is due to the fact that students who have just left their families have not yet become individualized. This situation is supported by similar studies and students' attitudes towards the elderly change more positively as the grade level increases.^{7,28}

In this study, a significant difference was found between the environment in which students live and their attitudes towards elderly individuals. Urbanisation affects attitudes towards the elderly and it was observed that those living in rural areas had more positive attitudes towards the elderly than those living in urban areas. This may be due to the fact that villages and towns have rural characteristics, the extended family structure is maintained in these regions, and individualisation is seen more limited. In the studies conducted, it is stated that the attitudes of the participants who grew up in regions with rural characteristics towards elderly individuals are more positive.^{6,8,19,29} This result supports our study.

In old age, loss of role, job or profession and a serious loss of income may occur with retirement. In this sense, economic levels also affect the quality of life of the elderly.^{5,20,25,30} Loss of income also reduces the quality of life and, like all segments of social life, affects the attitudes between young people and the elderly. This expectation in society may affect young people's understanding of old age. In our study, as income increases, individuals' positive attitudes towards old age also increase. However, as indicated in the difference between the village and the metropolis in terms of settlement, participants with a traditional family structure and low income level also have high positive attitudes towards the elderly. The reason for this positive attitude towards elderly individuals may be due to cultural values such as protecting and respecting elderly individuals in society. Since culture is transferred to young people through socialization, it can be more effective on young people who have recently separated from their families. This situation is also seen in our study, and it was determined that the attitudes of first-year students who had recently separated from their families towards the elderly were more positive, and the attitudes of third-year students who had experienced more advanced decision-making processes about their own lives towards their own old age were more positive, and our hypothesis H3 was accepted. This may be thought to be due to information about ageing as age increases. It is also thought that the attitudes of upper-class students towards old age become more positive as the participants interact more with the elderly individuals around them or their academic knowledge and clinical experience further develop.^{7,22,23,27}

In today's late modern society, staying young and being constantly productive is glorified, while old age is characterized by social decline and physical and mental inadequacy.^{21,25,26} In our culture, respect for the elderly and the responsibility of family members to care for the elderly have been internalized by people. However, individual living in urban environments and the preference for the nuclear family type may make it difficult to care for the elderly within the family. The behavioural models of the society towards the elderly can be examined with studies in different fields, as well as the losses in the status of the elderly and role changes can be examined. It can be said that as the positive attitude towards the elderly decreases, individuals will have more negative attitudes towards their own old age.

On the other hand, since broken families, such as parents who are not together, are more likely to live with the elderly, in our study, broken families it was thought that attitudes towards the elderly or one's own old age would differ. However, it can be said that the attitudes towards the elderly or their own old age do not differ because the majority of the participants' families are nuclear families with few children and the parents live together.

Respecting elderly individuals has a very important place in Turkish culture. Living together with elderly individuals, sharing the same house with them, their status in the family and their knowledge and experience have a great influence on the development of our culture. However, the rapid and various changes in the family structure of our country have caused dynamic individuals and young adults to prefer a life in business. Therefore, elderly individuals are pushed into the background, and some cultural values have changed. The changing and increasing awareness of the elderly population profile also increases the need for nutrition and dietetics specialists.

In order for students to improve their relationships with elderly individuals, to create an environment of trust and to reflect these values and behaviours;

- To take geriatrics-oriented courses during their undergraduate and graduate education in other health sciences, especially in nutrition and dietetics,
- Ensuring that students and field workers participate in geriatric courses,
- Considering the expectations of the elderly population, which is more fragile than the normal population and whose health awareness is increasing, health professionals take more responsibility,
- Visits to organisations providing services to the elderly by health care professionals and employees,
- Organising activities and projects to increase interaction with the elderly,
- It is our recommendation that the application areas of the students should be selected in the institutions serving the elderly.

References

Educ. 2003;24(1):31-46. doi:10.1300/J021v24n01_03

- 1. Samancı Tekin Ç, Kara F. Ageing in the world and Turkey. Article in Turkish. J Int Sci Res. 2018;3(1):219–229. doi:10.21733/ibad.370584
- Heikkinen RL, WHO Ageing and Health Programme. The role of physical activity in healthy ageing. World Health Organization. 1998. https://iris. who.int/handle/10665/65231
- Ardahan M, Arabacı Z, Limoncu G. Methods of coping with health problems of the elderly. Article in Turkish. *Tubbi Sosyal Hizmet Dergisi*. 2015; 6:28–43.
- World Health Organization. World report on ageing and health. 2015. Accessed Nov 15, 2021. https://iris.who.int/bitstream/handle/10665/ 186463/9789240694811_eng.pdf
- Yazıcı SÖ, Kalaycı I, Kaya E, Tekin A. Attitudes of students studying in health-related departments towards the elderly. Article in Turkish. *Gaziantep University J Soc Sciences*. 2016;15(2):601–614. doi:10.21547/jss. 256713
- Mandıracıoğlu A, Lüleci NE. Attitudes towards the elderly among Turkish pharmacy students. Article in Turkish. *Turkish J Geriatrics*. 2015;18(4): 305–309.
- Elbi H, Altan S, Rahman S, Özyurt BC, Şahin S, Çam FS. The attitudes of medical students toward the elderly. Article in Turkish. *Turkish J Geriatrics*. 2015;18(4):299–304.
- Aslan D, Şengelen M, Bilir N. Yaşlılık Döneminde Beslenme Sorunları ve Yaklaşımlar. Türk Geriatri Derneği; 2008. Accessed January 26, 2022. https://www.geriatri.org.tr/pdf/geriatriA5kitap_280308.pdf
- Bakırhan S, Özkeskin M, Reyhanioğlu DA, Gülpınar D. Analysis of the attitudes and approaches of physiotherapy and rehabilitation students towards the elderly. Article in Turkish. *Turkish J Geriatrics*. 2017;20(2):125– 134.
- Wood K, Gibson F, Radley A, Williams B. Pharmaceutical care of older people: what do older people want from community pharmacy? Int J Pharm Pract. 2015;23(2):121–130. doi:10.1111/ijpp.12127
- Chen AM, Plake KS, Yehle KS, Kiersma ME. Impact of the geriatric medication game on pharmacy students' attitudes toward older adults. *Am J Pharm Educ.* 2011;75(8):158. doi:10.5688/ajpe758158
- Kishimoto M, Nagoshi M, Williams S, Masaki KH, Blanchette PL. Knowledge and attitudes about geriatrics of medical students, internal medical residents and geriatric medicine fellows. J Am Geriatr Soc. 2005;53(1): 99–102. doi:10.1111/j.1532-5415.2005.53018.x
- Rasor-Greenhalgh SA, Stombaugh IA, Garrison ME. Attitude changes of dietetic students performing nutritional assessment on healthy elderly. J Nutr Elder. 1993;12(4):55–64. doi:10.1300/J052v12n04_06
- Lee SY, Hoerr SL, Weatherspoon L, Schiffman RF. Nutrition students improve attitudes after a guided experiential assignment with older adults. J Nutr Educ Behav. 2008;40(5):279–287. doi:10.1016/j.jneb.2007.09.011
- 15. Beling J. Effect of service-learning on knowledge about older people and faculty teaching evaluations in a physical therapy class. *Gerontol Geriatr*

- Reuben DB, Lee M, Davis JW Jr, et al. Development and validation of a geriatrics attitudes scale for primary care residents. J Am Geriatr Soc. 1998; 46(11):1425–1430. doi:10.1111/j.1532-5415.1998.tb06012.x
- Sahin S, Mandiracioglu A, Tekin N, Senuzun F, Akcicek F. Attitudes toward the elderly among the health care providers: reliability and validity of Turkish version of the UCLA Geriatrics Attitudes (UCLA-GA) Scale. Arch Gerontol Geriatr. 2012;55(1):205–209. doi:10.1016/j.archger.2011.08.015
- Otrar M. An attitude scale toward aging and elderliness: a validity and reliability study. Article in Turkish. *İstanbul University J Sociology*. 2016; 36(2):527-550. doi:10.16917/iusosyoloji.292680
- ÖZCAN S, DUYAN V, KOÇ AF, BOZDEMİR N. Third-year medical students' attitudes towards the elderly: evaluation of the effect of an educational programme. *Turkish J Geriatr.* 2013;16(2):210–215.
- Soyuer F, Ünalan D, Güleser N, Elmalı F. The attitudes of health vocational school students towards ageism and the relation of these attitudes with some demographical variables. Article in Turkish. *Mersin Univ Saglık Bilim Derg.* 2010;3(2):20–25.
- Eltantawy SH. Relation between nursing students' knowledge of ageing and attitude towards elderly people and their will and intent to work with the elderly. *J Educ Pract.* 2013;4(27):125–136.
- Özdemir Ö, Bilgili N. Attitudes of Turkish nursing students related to ageism. J Nurs Res. 2016;24(3):211–216. doi:10.1097/jnr.00000000000131
- 23. Brooks TR. Attitudes of medical students and family practice residents toward geriatric patients. J Natl Med Assoc. 1993;85(1):61–64.
- 24. Oktik N, Bozyer Ü, Durdu Z, Kökalan F, Top A. Huzurevinde Yaşayan Yaşlıların Yaşamı ve Yaşam Kalitesi: Muğla Huzurevi Örneği. In: BİRİNCİ SOSYAL HİZMETLER ŞURASI ÖN KOMİSYON RAPORLARI VE BİREYSEL ÇALIŞMALAR. 2004:353–372.
- Kurtkapan H. Attitudes of Y generation youth towards old age and ageing: the case of Nevşehir. Article in Turkish. 2020;13(1):48–55. doi:10. 46414/yasad.691177
- Dattani S, Rodés-Guirao L, Ritchie H, Ortiz-Ospina E, Roser M. Life Expectancy. Our World in Data. 2023. Accessed January 26, 2022. https:// ourworldindata.org/life-expectancy
- 27 Henríquez F, Retamal N, Silva F, Morales C. Attitudes towards ageing of Speech-language Pathology students in a Chilean University. *CoDAS*. 2020;32(1):e20190010. doi:10.1590/2317-1782/20192019010
- 28 Couteur DL, Bansal AS, Price DA. The attitudes of medical students towards careers in geriatric medicine. *Australas J Ageing*. 1997;16(4):225– 228. doi:10.1111/j.1741-6612.1997.tb01060.x
- 29 Mamcarz I, Torres K, Mamcarz P, Jurek K, Torres A, Szast K. The role of emotional intelligence in attitudes towards elderly patients – Comparative study of medical students from rural and urban areas. Ann Agric Environ Med. 2020;27(1):134–138. doi:10.26444/aaem/110770
- 30 Rao KV, Prasad BD, Avataramu C. Attitudes of the student youth and middle aged persons towards the elderly. *Indian J Soc Work*. 2000;61(1):42– 53.