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Attitudes of Medical Faculty Students Toward Ageism: A Cross-Sectional Study From Kayseri

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ABSTRACT

Objective: Attitudes of medical faculty students toward ageism are an important issue in terms of public health. In Turkey, there is not enough study to attract attention to ageism. In this study, it was aimed to determine some factors related to the attitudes of the first and last year students of Erciyes University Faculty of Medicine toward the elderly in the 2017–2018 academic year.

Materials and Methods: In this cross-sectional study, the data of 468 (71.6%) students studying in the first and last years were analyzed. As a data collection tool, a sociodemographic questionnaire and Ageism Attitude Scale (AAS) were used. The dependent variable of the study was the attitude toward ageism, independent variables were age, gender, grade, economic situation, family structure, the condition of staying with the elderly before and currently, and willingness to care for the elderly.

Results: The average age of participants was 21.8±3.0 years, 51.0% were first grade and 51.5% were women. The total AAS score of the students was 84.9±8.8, the restricting the life of the elderly was 36.8±4.3, the positive ageism score was 30.3±5.0, and the negative ageism score was 17.8±3.0. The AAS total score and the restricting the life of the elderly score were significantly higher in women and last grade students (p<0.05).

Conclusion: To develop students' attitudes toward the elderly in a positive way, elderly health and old age lessons should be included in the curriculum and students should be provided with spending time with the elderly.

Keywords: Ageism, attitudes to elderly, medical students

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INTRODUCTION

Over the past two centuries, people are getting older and their expected life expectancy is increasing (1). Aging is a conceptual process that has different dimensions such as biological, social, communal, psychological, functional, emotional, and economic aging (2). In Turkey, 65 years and above defined as elderly individuals. The UN defines 60 years and above as elderly population. The WHO, on the other hand, emphasizes that “the elderly individuals can be defined at different ages according to the geographical area they lived in” and generally accepted the age of 65, and sometimes 60 years of age and above as the elderly (3–6). The WHO and the UN define the age 80 and above as dotage (4, 6).

The WHO estimates that elderly population of the world population will increase from 12% to 22% between 2015 and 2050. The WHO states that in 2050, one out of every five people will be 60 years old and above, with a total of 2 billion people. According to the population projections in 2023, the TÜİK data, Turkey elderly population ratio of 10.2, are foreseen to be 22.6% in 2060 and 25.6% in 2080 (3). According to the UN definition, the rate of elderly population between 8% and 10% is older societies and over 10% are very old societies. According to this definition, Turkey will be among the very elderly populated countries in 2023 is estimated (3, 7, 8).

Discrimination is a concept involving all kinds of thoughts, attitudes, and behaviors not to recognize, limit, or prevent the rights and freedoms realized against race, ethnicity, color, gender, gender preference, language, religion, political, economic, sociocultural structure, or other views of the individual or societies. Ageism is a phenomenon faced by the elderly, as well as issues such as elder abuse and neglect that make life difficult and limited. Elderly discrimination “Ageism” is a term generally confused with age discrimination. The concept of ageism was first used by Gerontologist Butler in America in 1969, and ageism; defined as an actionable term like racial discrimination and gender discrimination against the older group between two different groups (9). Palmore drew attention to the presence of positive and negative aspects of ageism and stated that it is an unacceptable form of discrimination, just like discrimination against race, gender, and sexual preferences (10, 11).

When the literature of the researches conducted on students regarding elderly discrimination is examined, it is observed that students generally have a positive attitude toward the elderly, while some studies have also

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found negative attitudes (12–19). Considering that prospective physicians from health-care providers will serve the elderly, who constitute a significant part of the population in the future, it is likely that there will be negative attitudes toward the elderly, and therefore, determining their attitudes toward the elderly are extremely important to eliminate the problems. To protect and improve the health of elderly people and to improve their life quality, they should be free from all kinds of discrimination. There are not enough studies on ageism, which is another facet of elderly health and is actually little known, in Turkey. The researchers planned this study to raise awareness of future physicians on issues such as elderly health and age discrimination, ageism. The aim of this study is to determine the attitudes of the first and last grade students of Erciyes University Faculty of Medicine in the 2017–2018 academic year toward the elderly and some factors that may be associated with these attitudes.

MATERIALS and METHODS

This cross-sectional study was conducted with students studying at Erciyes University Faculty of Medicine in the 2017–2018 academic year. A total of 654 students in the first and last years of the faculty were planned to be included in the study. The first and last year students were selected, with the assumption that their attitudes toward ageism would make a difference in the education they received in the clinic and courses. We were able to reach 542 students in total. Data on 468 (71.6%) students out of 472 who decided to participate in the study were analyzed. The questionnaire data of four students were not included in the assessment because of incomplete data. The first-grade students were visited twice in their classrooms with an interval of 2 weeks and the last grade students were visited twice by the researchers in the units they did an internship with an interval of 2 weeks, by considering their absenteeism status. After being informed about the research and obtaining verbal consent, the students who accepted to participate in the research were given a questionnaire and a scale, and the questionnaire and the scale were collected after being filled in by the students under the supervision of the researchers. The study takes approximately 10 min for each student to complete.

The dependent variable of the study was the attitude toward ageism, and independent variables were age, gender, grade, economic situation, family structure, living places, having a health problem in the family, the condition of staying with the elderly before and currently living with old people, and willingness to care for the elderly. As a data collection tool, the Ageism Attitude Scale (AAS) and the sociodemographic questionnaire form prepared by the researchers and consisting of 21 questions, 3 of which are open-ended were used. AAS was developed in 2011 by Vefikuluçay (20), consisting of 23 items in a 5-point Likert type and the scale's total internal consistency coefficient (Cronbach alpha) was found to be 0.80. There were positive and negative attitude expressions on the scale. Each item is scored between 1 (strongly disagree) and 5 (totally agree). Scale consisted of three subdimensions; restricting the life of the elderly, positive and negative ageism. The total scores were calculated by reversing the answers to the statements that had a negative meaning in terms of ageism. The AAS total score was 23–115 and the scores that can be obtained from the dimensions

of restricting the life of the elderly, positive discrimination, and negative discrimination were, respectively, 9–45, 8–40, and 6–30. The high total score and subdimension scores show that the attitude toward ageism was positive. Points had no cutoff.

Statistical Analysis

The data were analyzed by SPSS 22.0 software on the computer. For descriptive statistics, frequency and percentage, mean value, standard deviation, and min–max were used. Pearson Chi-square test was used for statistical analysis of categorical data. For statistical analysis of quantitative data, Kolmogorov–Smirnov test was used to see whether it conformed to normal distribution. Mann–Whitney U and Kruskal–Wallis (post hoc Dunn's test) were used because dependent variables did not conform to normal distribution. Spearman correlation coefficient was used to show the relationship between the variables. In statistical analysis, $p < 0.05$ was considered statistically significant. This study was conducted in accordance with the Declaration of Helsinki and was accepted ethically appropriate by the Erciyes University Clinical Research Ethics Committee with the number 2018/120 in 2018 and all participants in the study were informed about the study and their verbal consents were obtained.

RESULTS

The average age of the research group was 21.8 ± 3.0 (min–max: 18–40) years, 51.0% were first grade and 51.5% were women. The family structure of 90% of the students was the nuclear family, 76.9% of their families lived in the province. About 39.3% of the students stated the economic status of their families as good, 58.1% as the moderate, and 2.6% as bad. Some sociodemographic characteristics of students are given in Table 1.

The ratio of those who lived in the same house with individuals aged 65 and above before was found to be 38.7%, and 9.8% of those were still living in the same house with individuals aged 65 and above. Moreover, this ratio was 34% for those in the extended family structure (7% in the nuclear family structure) ($\chi^2 = 34.562$, $p < 0.001$). While 59.8% of the students stated that they were willing to serve elderly individuals. There was no significant difference between students' age groups, gender, classes, family economic status, and place of residence ($p > 0.05$). It has been observed that those with extended family structure were more willing to provide care to the elderly than those in the nuclear family structure (Respectively: 74.5% –58.2%, χ^2 : 6.989, P : 0.030).

Students were asked with some propositions of what old age meant to them; they stated that 69.2% kindness-compassion, 57.5% disease, 46.2% wisdom, 44.7% weakness, 42.3% loneliness, 32.3% addiction, 11.5% stated exclusion and depression, 11.3% happiness, and 10.9% unhappiness. When the students were asked about the living at home status of the elderly people that they know; they stated that 45.3% lived with first-degree relatives, 41.9% with their spouse, and 20.1% lived alone at home.

Students' AAS's total score average of the participants was 84.9 ± 8.8 and the score of subdimension restricting the life of the elderly, positive ageism, and negative ageism was 36.8 ± 4.3 , 30.3 ± 5.0 , and 17.8 ± 3.0 , respectively. The AAS total score and the subdimension score restricting the life of the elderly were sig-

Table 1. Sociodemographic characteristics of students

Characteristics	n (468)	%
Gender		
Male	227	48.5
Female	241	51.5
Age groups		
21 years and below	228	48.7
22 years and above	240	51.3
Grade		
1. grade	238	50.9
6. grade	230	49.1
Mother's education status		
Secondary school and below	232	49.6
High school	114	24.4
University	122	26.1
Father's education status		
Secondary school and below	114	24.4
High school	96	20.5
University	258	55.1
Residence of the student's family		
Provincial center	360	76.9
District	82	17.5
Village town	26	5.6
Where the student stayed in Kayseri		
At home with family	228	48.7
Dormitory	124	26.5
At home with friends	89	19.0
At home alone	27	5.8
Economic status of the family		
Good	184	39.3
Moderate	272	58.1
Bad	12	2.6
The presence of an individual with a significant health problem in the family		
Yes	100	21.4
No	368	78.6

nificantly higher in women and last grade students ($p < 0.05$) (Table 2). All scale scores were found to be significantly higher in the group of 22 and above ($p < 0.05$) (Table 2). It is positively correlated between age and the total AAS score and the size of restricting the life of the elderly, and as the age increases, AAS scores increase (correlation coefficient: 0.149, $p = 0.001$). There was no significant difference between the scale scores of the students according to the place of residence where they lived in Kayseri and the economic status of their families and the place where their families lived ($p > 0.05$), and the subdimension scores of students with extended families were found to be significantly lower ($p < 0.05$) (Table 2). No significant relation was found between the education level of the parents of the students and the AAS scores ($p > 0.05$).

The fact that the students still live in the same house with the elderly 65 years and over was not found to be related with the scale scores ($p > 0.05$), nevertheless, negative discrimination scores against the elderly were found to be lower in those who previously lived in the same house with elderly individuals ($p < 0.05$). The negative ageism score of the students with a significant health problem in their families was found low ($p < 0.05$). Scale scores were found to be statistically higher in students who were willing to care for the elderly (Table 3).

DISCUSSION

In this study, although the students generally had a positive attitude toward age discrimination, their scores were moderate. In our study, the total AAS score was 84.9 out of 115. In the other studies conducted with nursing students, while AAS total scores were found to be close to our study as Toygar and Karadakovan 83.9, Gürel 85.1, and Usta et al. 84.0. However, Yılmaz and Özkan found 100.9 higher than our study and in the other study of Özer and Terkeş, the total AAS score was found to be 68.2, much lower than our values (12, 21–24). This score was found 83.8 by Yazıcı et al. in the elderly care program students, 51.0 in the medical faculty students in different departments in the field of health by Köse et al., and 86.3 in the undergraduate students studying in the Department of Social Work by Ceylan and Öksüz (14, 16, 18). The positive attitudes toward ageism in our study can be interpreted as a result of the traditional structure of our society in accordance with the norms and values of the eastern culture. However, average scores indicate the presence of age discrimination among medical students.

In this study, the AAS total score and the subdimension score restricting the life of the elderly were found to be significantly higher in the last year students, and in the group of 22 and above, all scale scores were significantly higher. In our study, the total AAS scores increase with age and there was a positive relationship between these two variables. In a study between young doctors in Singapore, no relationship was found between age and ageism, and in a review, positive attitudes increase with increasing age and in another study with Greece nursing students, it has been shown that senior students had more positive attitudes toward the elderly (25–27). It can be conceivable that with the advancement of age and increasing time spent in the clinic, students' empathy abilities increase and their attitudes toward the elderly and the physiological process of human nature in a positive way.

In this study, the subdimension of restricting the life of the elderly was found significantly higher in women. As in our study group, it has been shown in some similar studies that female students have more positive attitudes toward the elderly, in addition to this, there are studies in the literature that show that men have more positive attitudes, and there are also studies indicating that gender and elderly discrimination are not related (13, 15, 27–29). It can be thought that female students have more positive attitudes toward the elderly because they are under the influence of the roles attributed to gender in our society and they have responsibilities toward home, work, and relatives during their education years.

There was no statistically significant difference between the scale scores of the students according to their place of residence, and the scores of restricting the life of the elderly were significantly

Table 2. Distribution of AAS scores according to the sociodemographic characteristics of the students

Characteristics	n	Restricting the life of the elderly Median (Min.–Max.) and Mean±SD	Positive ageism Median (Min.–Max.) and Mean±SD	Negative ageism Median (Min.–Max.) and Mean±SD	AAS total score Median (Min.–Max.) and Mean±SD
Gender					
Male	227	36 (19–45) 36.0±4.8	31 (8–40) 30.2±5.5	18 (11–30) 17.7±3.0	85 (52–107) 83.9±9.4
Female	241	38 (29–45) 37.6±3.6	31 (16–40) 30.3±4.3	18 (10–30) 18.0±3.0	86 (64–110) 85.9±8.2
p*		0.001	0.340	0.234	0.075
Age (year)					
≤21	228	36 (19–44) 36.0±4.2	30 (8–40) 29.9±4.6	17 (10–30) 17.6±3.0	84 (55–103) 83.5±8.2
≥22	240	38 (22–45) 37.6±4.3	31 (10–40) 30.6±5.3	18 (10–30) 18.1±3.0	87 (52–110) 86.3±9.2
p*		<0.001	0.045	0.049	<0.001
Grade					
1. grade	238	36 (19–45) 35.9±4.2	30 (8–40) 29.9±4.7	17 (10–30) 17.6±3.0	84 (55–103) 83.5±8.3
6. grade	230	38 (22–45) 37.7±4.2	31 (10–40) 30.7±5.2	18 (10–30) 18.1±3.0	87 (52–110) 86.4±9.1
p*		<0.001	0.030	0.085	<0.001
Economic status					
Good	184	37 (23–45) 36.9±4.1	31 (10–40) 30.8±4.2	17.5 (10–25) 17.5±2.8	85 (57–105) 85.3±7.7
Moderate	272	37 (19–45) 36.7±4.4	31 (8–40) 29.9±5.4	18 (10–30) 18.1±3.1	86 (52–110) 84.7±9.4
Bad	12	38 (24–41) 36.6±5.1	32 (16–37) 30.6±5.9	17.5 (13–21) 17.2±3.0	86.5 (58–96) 84.3±11.1
p**		0.965	0.282	0.190	0.915
Residence of the student's family					
Provincial center	360	37 (19–45) 36.9±4.2	31 (8–40) 30.4±4.9	18 (10–30) 17.8±3.0	85 (52–110) 85.1±8.5
District	82	37 (22–44) 36.5±4.7	30.5 (10–38) 29.8±5.0	18 (13–25) 18.0±2.8	85 (57–105) 84.3±9.9
Village town	26	37 (27–44) 36.7±4.7	31.5 (17–38) 30.1±6.1	18 (11–27) 18.1±3.6	86 (65–99) 84.8±9.5
p**		0.901	0.659	0.889	0.903
Where the student stayed in Kayseri					
At home with family	228	37 (22–45) 37.1±4.0	31 (11–40) 30.4±4.7	18 (10–30) 18.1±3.1	86 (52–110) 85.5±8.5
Dormitory	124	36.5 (19–45) 36.1±4.6	30 (16–40) 29.8±4.7	17 (12–25) 17.5±2.8	84 (55–105) 83.4±8.9
At home with friends	89	38 (24–45) 37.2±4.3	32 (10–40) 30.9±5.2	18 (11–27) 17.7±2.8	86 (57–101) 85.8±8.7
At home alone	27	37 (24–44) 36.6±5.3	32 (8–40) 29.7±7.1	18 (13–30) 18.4±4.4	84 (64–107) 84.6±10.9
p**		0.245	0.143	0.230	0.132
Family type					
Nuclear family	421	37 (21–45) 37.0±4.2	31 (8–40) 30.3±5.0	18 (10–30) 17.9±3.1	85 (52–110) 85.1±8.8
Extended family	47	36 (19–44) 35.5±5.2	31 (16–40) 30.6±4.9	18 (13–27) 17.7±2.4	85 (58–101) 83.8±9.3
p*		0.025	0.536	0.803	0.441
Total	468	36.8±4.3	30.3±5.0	17.8±3.0	84.9±8.8

Min: Minimum; Max: Maximum; SD: Standard deviation; *: Mann-Whitney U; **: Kruskal-Wallis; AAS: Ageism Attitude Scale

lower in those with extended families. Although there was no significant relationship between family type and AAS scores in the study by Gürel's (22) conducted with nursing students, the scores for restricting the life of the elderly were found to be lower in students with extended family structure. Interestingly, Soyuer et al. (13) found the subdimension of restricting the life of the elderly to be low in those with extended family structure, similar to our study. Oral et al. (29) found that the study of health workers in the same

faculty of medicine restricting the life of the elderly and the total scale score was significantly lower in the extended family structure. In this study, students in extended family structure stated that they lived with elderly individuals at a significantly higher rate and perhaps as a result of this they may be more affected by the health, economic, and social problems of elderly family members and as a result they may have adopted a negative attitude toward restricting the life of the elderly.

Table 3. Distribution of AAS scores according to some characteristics of students

Characteristics	n	Restricting the life of the elderly Median (Min.–Max.) and Mean±SD	Positive ageism Median (Min.–Max.) and Mean±SD	Negative ageism Median (Min.–Max.) and Mean±SD	AAS total score Median (Min.–Max.) and Mean±SD
Status of living with the elderly before					
Yes	181	37 (1–45) 37.0±4.5	31 (10–40) 30.6±5.4	17 (10–28) 17.3±2.9	86 (52–103) 84.9±9.1
No	287	37 (21–45) 36.7±4.2	31 (8–40) 30.1±4.7	18 (10–30) 18.2±3.1	85 (55–110) 85.0±8.7
p*		0.234	0.125	0.001	0.651
Currently living with elderly individuals					
Yes	46	37 (19–45) 37.4±4.3	30.5 (8–40) 29.7±5.7	18 (13–30) 18.6±3.7	86.5 (60–105) 85.7±8.1
No	422	37 (21–45) 36.7±4.3	31 (10–40) 30.4±4.9	18 (10–30) 17.8±2.9	85 (52–110) 84.9±8.9
p*		0.272	0.548	0.297	0.580
The presence of an individual with a significant health problem in the family					
Yes	100	37.5 (22–45) 36.9±4.4	32 (8–40) 30.6±5.4	17 (11–30) 17.2±3.0	85 (58–107) 84.6±9.1
No	368	37 (19–45) 36.8±4.3	31 (10–40) 30.2±4.9	18 (10–30) 18.0±3.0	86 (52–110) 85.0±8.8
p*		0.770	0.143	0.006	0.722
Willingness to care for the elderly					
Willing	280	38 (19–45) 37.6±4.0 ^a	32 (8–40) 31.6±4.3 ^a	18 (10–30) 18.0±3.1	88 (60–110) 87.3±8.0 ^a
Undecided	170	36 (22–45) 36.0±4.2 ^b	29 (11–40) 28.9±4.8 ^b	18 (10–25) 17.7±2.7	83 (58–99) 82.6±8.1 ^b
Not willing	18	31 (21–40) 31.6±4.9 ^c	23 (10–31) 22.6±5.6 ^c	16.5 (10–27) 16.7±3.6	72.5 (52–81) 70.8±9.1 ^c
p**		<0.001	<0.001	0.131	<0.001
Total	468	36.8±4.3	30.3±5.0	17.8±3.0	84.9±8.8

Min: Minimum; Max: Maximum; SD: Standard deviation; *: Mann–Whitney U; **: Kruskal–Wallis (post hoc Dunn's test); a, b, c: The difference between groups that do not carry the same letter in each column is important (p<0.05); AAS: Ageism Attitude Scale

In this study, there was no significant relationship between the family's economic status and AAS scores. In the study of Oral et al., it has been shown that health care workers with better economic status have more positive attitudes and Uğur and Hendekçi found no significant relationship between the economic situation and the AAS scores in their work in the nursing home staff and also in the compilation of Samra et al. with medical students and doctors, similar to our study, no significant relationship was found between the economic situation and AAS scores (19, 29, 30). This may be due to the questioning of the economic situation of the student's family. In addition, the fact that economic conditions do not affect individuals in the acquisition of social values and judgments makes us think that Turkey has a traditional social structure and strong family ties.

There was no statistically significant relationship between students "parents" education level and AAS scores. In the literature, similar to our study, a significant relationship did not shown between the parents' educational and AAS scores (12, 13, 16). In fact, with the increasing education level of their parents, attitudes toward the elderly were expected to increase as an effect of education, because Oral et al. (29) had shown that those with a high level of education

have a positive attitude toward the elderly. This situation suggests that the education level of families was not related to their children's attitudes toward elderly individuals.

In the study, no relation was found between students living with elderly individuals and their scale scores. Negative ageism was found lower in those who previously lived in the same home with elderly individuals. Similarly, in the studies of Köse et al. in students, in Uğur and Hendekçi's study in nursing home staff, in Yılmaz and Özkan's study and Sari et al.'s study in the study of nursing students, similarly, living with the elderly was not related to attitudes toward the elderly (12, 17, 18, 30). Assuming that living with the elderly may affect the development of positive and negative attitudes, it is necessary to examine in more detail how negative ageism occurred with living with the elderly before.

The negative ageism score of the students with a significant health problem in their families was found low. It was thought that the stress caused by the health problems experienced in the family on the students may cause this situation. Scale scores were found to be significantly higher in those who were willing to give care to the elderly.

In the studies of Gürel and Aydın with nursing students, it was observed that those who were willing to serve elderly individuals showed a more positive attitude toward the elderly, while no relationship was found in Yılmaz and Özkan's study (12, 15, 22). In our study, it can be concluded that those who are willing to care for the elderly have more positive attitudes toward the elderly, when the treatment and care services for the elderly are comprehensively explained to the students and the importance of the issue for the aging population is emphasized and when the willingness to provide services is increased, positive attitudes toward the elderly will occur.

Limitations

Conducting our study in the first and last grades of the medical school was among the limitations of not including other students. It is thought that samples covering all classes will be useful for future studies. However, it was believed that this study will contribute to the literature due to the limited number of researches related to the subject of medical students.

CONCLUSION

In our study, students' attitudes toward the older people were generally positive. The scores were found to be higher in female students, age 22 and above, last grade students, and those willing to care for the elderly. Scale scores did not differ between groups such as economic situation and place of residence, and education level of parents.

The lowest subscale score of the students was negative ageism. Negative ageism scores for the elderly were found lower in students who previously lived with elderly individuals and who had a significant health problem in the family. Considering the negative impact of life with elderly individuals on discrimination, the social support to student who has lived with elderly individuals and has a health problem in their family will be beneficial.

It was observed that those who were willing to give care to the elderly had a more positive attitude. Ageism can be prevented by making students adopt the social and individual importance of serving elderly people. In particular, it will be useful to add subjects related to the subject such as aging, service to the elderly, and ageism in the curriculum to improve the attitudes of first-grade students toward the elderly in a positive way and to raise awareness in ageism. Students should be ensured to spend time with the elderly and social activities that will raise awareness on special days of the elderly can bring positive results.

Ethics Committee Approval: The Erciyes University Clinical Research Ethics Committee granted approval for this study (date: 07.03.2018, number: 2018/120).

Informed Consent: Verbal informed consent was obtained from patients' relatives who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – FÇ, OG; Design – OG; Supervision – OG, FÇ; Materials – BO, DE; Data Collection and/or Processing – BO, DE; Analysis and/or Interpretation – BO; Literature Search – FÇ, BO; Writing – BO, DE; Critical Reviews – FÇ, OG.

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