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RESEARCH

ATTITUDES TOWARDS THE ELDERLY AMONG TURKISH PHARMACY STUDENTS

ABSTRACT

Introduction: The number of elderly people as a proportion of the total population is rapidly increasing, and they have the greatest need for healthcare services, including pharmaceutical care. Therefore, development of positive attitudes and behaviour regarding elderly people and ageing is particularly important for pharmacists. This cross-sectional study evaluated the attitudes of second-year pharmacy students at two Turkish universities on elderly.

Materials and Method: Self-administered questionnaires completed by 277 students collected sociodemographic information and responses to the University of California, Los Angeles Geriatrics Attitudes Scale (UCLA), which has been validated in Turkish.

Results: The average score on this scale was 47.23±5.93. Female students had significantly more positive attitudes than males. Personal variables such as previous experience in offering services to the elderly or living with an elderly relative and having an elderly relative did not significantly affect the attitudes towards the elderly.

Conclusion: It is recommended that pharmacy schools expand their coverage of healthcare for the elderly in order to facilitate development of relevant knowledge and positive attitudes towards this population.

Key Words: Attitudes Towards the Elderly; Students; Pharmacy.



ARAŞTIRMA

ECZACILIK FAKÜLTESİ ÖĞRENCİLERİNİN YAŞLILARA YÖNELİK TUTUMLARI

Öz

Giriş: Toplam nüfus içinde yaşlıların oranı hızla artarken, sağlık hizmetlerine ve farmasötik hizmetlere gereksinim de çoğalmaktadır. Bu nedenle eczacıların yaşlılara yönelik pozitif tutum geliştirmeleri önemlidir. Bu kesitsel çalışmada, iki üniversitenin ikinci sınıf eczacılık fakültesi öğrencilerinin yaşlılara yönelik tutumları değerlendirilmiştir.

Gereç ve Yöntem: Yaşlılara yönelik tutumu değerlendirmek üzere UCLA ölçeği kullanılmıştır. Toplam 277 öğrenciden öz-bildirim yöntemi ile UCLA ölçeğine yanıtlar ve demografik veriler toplanmıştır.

Bulgular: Ortalama puan 47.23±5.93'dür. Kız öğrenciler erkek öğrencilerden daha olumlu tutuma sahip olduğu belirlenmiştir. Yaşlılara yönelik hizmet deneyimi, yaşlı akraba varlığı, yaşlı akraba ile aynı evde yaşama gibi diğer özellikler ile ilişki saptanamamıştır.

Sonuç: Eczacılık fakülteleri, öğrencilerin bu gruba yönelik olumlu tutum geliştirebilmeleri için yaşlılarla ilgili eğitimlerinin kapsayıcılığını artırmalıdır.

Anahtar Sözcükler: Yaşlılara Yönelik Tutum; Öğrenci; Eczacı.



INTRODUCTION

The ageing of our society is one of the primary issues that highly influence the healthcare and social services sectors today (1). The geriatric population is a special group in terms of healthcare services. It frequently requires high levels of care due to chronic health problems, more complex medical treatments, multiple prescription medications and potential interactions of those medications. On the other hand, the elderly often have insufficient knowledge about the proper use, adverse effects and interactions of the drugs they take. Due to the deterioration of their mental functions, medication management becomes increasingly difficult for them (2-4). Therefore, enabling correct administration of prescriptions to elderly patients is one of their most fundamental healthcare needs (5). Many healthcare personnel are not prepared for the demographic transformations taking place today (6). Serving geriatric patients with healthcare personnel who are not well equipped for this work and who do not have positive attitudes towards the elderly complicates their already complex health issues and can cause new health issues to arise (7).

Pharmacists are the most accessible healthcare personnel in society. Their responsibilities include preventing medication-related problems among the elderly, minimizing polypharmacy and ensuring patient compliance with treatment, medication therapy management and optimization of complex medication regimens. Pharmacists must have positive attitudes towards their geriatric patients in order for this population to receive optimal pharmaceutical care (8,9).

Healthcare professionals are expected to adopt a professional attitude towards all patient groups in their service offerings. However, geriatric patients, partly because of their fragility and complex needs, are at the greatest risk of experiencing negative attitudes in healthcare and social services. The attitudes towards elderly individuals found in the broader culture shape the attitudes of healthcare personnel towards this group, and these attitudes have a significant impact on the quality of healthcare service offerings (6,10,11).

Many previous studies from different countries were designed to determine attitudes of students of medicine, dietetics, nursing and physiotherapy towards the elderly (7,11-21). However, if healthcare students have difficulty in understanding and empathizing with the elderly and if they have insufficient awareness of health issues specific to old age, these factors will negatively impact their attitudes towards the elderly. It is important to understand the attitudes of pharmacy stu-

dents towards the elderly because they will play a major role as part of the team who offer healthcare services to this group.

The objective of this study is to evaluate attitudes towards the elderly among second-year pharmacy students at two universities.

MATERIAL AND METHOD

Design and Sample

This cross-sectional study was conducted at two universities, Ege University and Marmara University, in the western part of Turkey. The study participants were 277 pharmacy students, 144 from Ege University and 133 from Marmara University. These students cover elderly healthcare topics in their public health class. Data for the study were collected following the completion of this class.

Instruments

The students completed the self-administered questionnaires. Demographic questions and personal characteristics (age, sex, families' place of residence, having an elderly family member, living with elderly people and interest in working with elderly people) were included in the data collection form. The University of California, Los Angeles Geriatrics Attitudes Scale (UCLA-GA Scale), a commonly used tool to evaluate attitudes towards the elderly developed by Reuben et al. (12), was also administered. The UCLA-GA Scale has relatively few items and is multi-dimensional. It has been tested for validity and reliability in English and Turkish with data collected from healthcare personnel. Validity and reliability testing in Turkish was performed by Sahin et al. (22). Fourteen items in the UCLA-GA Scale are evaluated on a 5-point Likert scale with choices of 'strongly disagree', 'disagree', 'neutral', 'agree' and 'strongly agree'. On sentences containing positive attitudes towards the elderly, scores range from 5 for 'strongly agree' to 1 for 'strongly disagree'; for sentences with negative attitudes, the scoring scheme is reversed. The UCLA-GA has four dimensions: social values, medical service, care and resource allocation. The total score is obtained by combining all four dimensions. The highest possible score is 70, with higher scores indicating a more positive attitude. Average scores can also be calculated, with averages of 1 to 2 indicating negative scores, 3 indicating neutral scores and 4 to 5 indicating positive scores.



Ethical Considerations

Approval from the ethical committee and official permission from the faculties involved were obtained in advance of the study. Consent from the students was also obtained.

Statistical Analysis

We analysed the data using SPSS 18.5 for Windows (SPSS Inc., Chicago, IL), treating $p < 0.05$ as a statistically significant value. Averages were expressed as plus or minus (\pm) standard deviation. Relationships between the scores obtained from the UCLA-GA Scale and sociodemographic characteristics of the participants were evaluated using the t -test and ANOVA.

RESULTS

The sample contained 69% female and 31% male students (Table 1). The average age was 20 ± 1.3 years. Asked to describe their place of longest residence before coming to the school, 5.1% of the students identified a village, 24.6% a town and 70.3% a city. For their post-graduate career, 43.4% of the students expressed their desire to work as a free-standing pharmacist and 21.3% as a hospital pharmacist, 11.8% wanted to perform academic studies and 19.9% wanted to work in pharmaceutical companies or the private sector. Almost twenty-two percent of the students had participated in

Table 1— Sociodemographic Characteristics of the Study Group

	Number	%
Sex		
Female	189	68.2
Male	88	31.8
Place of longest residence		
Village	14	5.1
Town	68	24.5
City	195	70.4
Desired post-graduate work field		
Free-standing pharmacist	118	42.6
Hospital pharmacist	58	20.9
Faculty member	32	11.6
Pharmaceutical company/private sector	54	19.5
Other	15	5.4
Presence of elderly relative		
Yes	261	98.9
No	16	1.1
Participation in service to the elderly		
Yes	60	21.7
No	217	78.3

serving the elderly previously; 98.9 of the students have elderly relatives; 10.4% of the students were living or had lived with an elderly relative in the same house; 72.9% of the students agreed that the percentage of elderly among the population in our society was increasing day by day.

The average score per question on the UCLA-GA Scale was calculated as 3.37 ± 0.42 (2.0–4.5), and the average total score was 47.23 ± 5.93 (28–64). Female students had statistically significantly positive attitudes (t : 2.85, 0.005). Other variables such as previous experience in offering services to the elderly and living with an elderly relative did not significantly affect attitudes towards the elderly. Total scores on the UCLA-GA Scale items are included in Table 2. The lowest average scores were obtained on items 6, 8 and 13, whereas the highest positive attitudes were found on items 1 and 4.

Table 2— Mean Scores on Items of the UCLA-GA Scale

Items	Mean \pm sd
1. Most old people are pleasant to be with.	4.16 \pm 1.06
2. The government should reallocate money from care of the elderly to research on AIDS or paediatric diseases.	3.12 \pm 1.02
3. If I have the choice, I would rather see younger patients than elderly ones.	3.25 \pm 1.10
4. It is society's responsibility to provide care for its elderly persons.	4.16 \pm 1.06
5. Medical care for old people uses up too much human and material resources.	3.20 \pm 1.04
6. As people grow older, they become less organised and more confused.	2.05 \pm 1.05
7. Elderly patients tend to be more appreciative of the medical care they receive than are younger patients.	3.86 \pm 1.06
8. I believe that taking a medical history from elderly patients will frequently be an ordeal.	2.55 \pm 1.05
9. I tend to pay more attention to and have more sympathy towards elderly patients than younger patients.	3.73 \pm 1.09
10. Old people in general do not contribute much to society.	3.62 \pm 1.15
11. Treatment of chronically ill old patients is hopeless.	3.27 \pm 1.00
12. Old people don't contribute their fair share towards paying for their healthcare.	3.46 \pm 0.97
13. In general, old people act too slowly for modern society.	2.68 \pm 1.08
14. It is interesting to listen to old people's accounts of their past experiences.	4.07 \pm 1.06



DISCUSSION

The largest age group who receive assistance from pharmacists is the elderly. Developing positive attitudes and behaviour regarding older people and ageing is significant for offering services to these individuals. In this study, attitudes of second-year pharmacy students at two Turkish universities were evaluated with the Turkish version of the UCLA-GA Scale. The average total score on the scale was 47.23 ± 5.93 , with a range of 28–64. Pharmacy students overall can be said to have a neutral to mildly positive attitude regarding the elderly. Adkins et al. found similar UCLA-GA Scale scores among American pharmacy students and interpreted them by saying that the 'students had a favourable opinion about geriatrics (mean > 3.0) (23). In another study that evaluated the attitudes of Turkish nursing students using the same scale, the average score was 48.64 ± 5.51 (20). Average UCLA-GA scores of medicine students range between 3.58 and 3.77 in different studies (12,15).

The lowest average score among the pharmacy students in this study was on the item 'As people grow older they become less organised and more confused', and the highest scores were on the items 'Most old people are pleasant to be with' and 'It is society's responsibility to provide care for its elderly persons'. Adkins et al. found that the same item had the lowest score among U.S. pharmacy students, whereas the item with the highest score was 'Treatment of chronically ill old patients is hopeless' (23). Female students have been found to have statistically significantly higher UCLA-GA Scale scores. Characteristics such as sex, age, being of urban or rural origin, living with an elderly relative and having participated in services for the elderly did not significantly affect the results. No difference was found in any of these variables for the American pharmacy students (23). In studies of medical, nursing and dietetics students, female students and those wishing to work with the elderly exhibited more favourable attitudes (15,16,19,20). Beliefs and attitudes towards the elderly and old age vary across cultures, and social attitudes towards the elderly also influence healthcare personnel (24).

This study has some limitations. It evaluated attitudes towards older people among pharmacy students at only two universities; hence, the results cannot be generalized to all pharmacy students in Turkey, let alone internationally. This study is cross sectional in its design; hence, it is difficult to make causal inferences, and the results may have been different had the study been administered to students at a different point in their training.

Health care personnel offering services to the elderly should be trained in and enthusiastic about providing about geriatric services. Moreover, it is important for them to establish good communication with the elderly for the sake of improving the service offered. Good communication with an elderly patient enhances trust. The ability to empathize with and appreciate the patient's condition is necessary in pharmaceutical care. In contrast, negative attitudes and prejudices inhibit empathy. Pharmacy students might have difficulty in developing a fully positive attitude, since they are influenced both by the generation gap between themselves and their patients and by general social attitudes (25). The geriatric population is an especially challenging patient group due to its chronic health problems and high level of medication use. It is important for pharmacists to fully understand their role in services for the elderly. Faculties of pharmacy should improve the geriatric knowledge and attitudes of their students to prepare them to meet older patients' increasing need for pharmaceutical care, and they should include programs that will afford students the chance to interact with elderly patients. Knowing the health and social requirements of the geriatric population and understanding the importance of interprofessional collaboration are important assets for pharmacists' future careers (9,14).

In conclusion, overall, the attitudes of pharmacy students towards the elderly were neutral to mildly positive, although strongly positive views were detected on some items of the UCLA-GA Scale. The attitudes of female students were more positive than those of the male students. Caring for the elderly is a particular concern for all healthcare personnel. Awareness and preparedness, especially among the pharmacists who undertake pharmaceutical care for the elderly, can be attained only if the students develop positive attitudes. Shaping the attitudes of healthcare personnel towards the elderly is instrumental to meeting the multidimensional health requirements of geriatric patients, solving their existing problems and improving geriatric services.

REFERENCES

1. WHO. Social Development and Ageing: Crisis or Opportunity? International Telecommunications Union 2000. (Internet) Available from: <http://www.who.int/ageing/publications/development/en/index.html>. Accessed:24.8.2015.
2. 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):121-30. (PMID:24905628).



3. Elliott RA, Booth JC. Problems with medicine use in older Australians: a review of recent literature. *Journal of Pharmacy Practice & Research* 2014;44(4):258-71.
4. Mamen AV, Hakonsen H, Kjome RL, Gustavsen-Krabbesund B, Toverud EL. Norwegian elderly patients' need for drug information and attitudes towards medication use reviews in community pharmacies. *Int J Pharm Pract* 2015;20. doi:10.1111/ijpp.12184. (Epub ahead of print). (PMID:25801503).
5. Spinewine A, Fialova D, Byrne S. The role of the pharmacist in optimizing pharmacotherapy in older people. *Drugs Aging* 2012;29(6):495-510. (PMID:22642783).
6. Fabiano JA, Waldrop DP, Nochajski TH, Davis EL, Goldberg LJ. Understanding dental students' knowledge and perceptions of older people: toward a new model of geriatric dental education. *Journal of Dental Education* 2005;69:419-33. (PMID:15800255).
7. Deasey D, Kable A, Jeong S. Influence of nurses' knowledge of ageing and attitudes towards older people on therapeutic interactions in emergency care: A literature review. *Australas. J Ageing* 2014;33(4):229-36. (PMID:25471745).
8. Barry H, Parsons C, Passmore A, Hughes C. Community pharmacists and people with dementia: a cross-sectional survey exploring experiences, attitudes, and knowledge of pain and its management. *Int J Geriatr Psychiatr* 2013;28(10):1077-85. (PMID:23348866).
9. Odegard PS, Breslow RM, Koronkowski MJ, Williams BR, Hudgins GA. Geriatric pharmacy education: a strategic plan for the future. *Am J Pharm Educ* 2007;71(3):Article 47. (PMID:17619647).
10. Chen AM, Plake KS, Yehle KS, et al. Impact of the geriatric medication game on pharmacy students' attitudes toward older adults. *Am J Pharm Educ* 2011;75(8):Article 158. (PMID:22102748).
11. Kishimoto M, Nagoshi M, Williams S, Masaki K, Lanoie-Blanchette P. Knowledge and attitudes about geriatrics of medical students, internal medical residents and geriatric medicine fellows. *J Am Ger Soc* 2005;53:99-102. (PMID:15667384).
12. 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;46:1425-30. (PMID:9809767).
13. Chua MPW, Tan CH, Merchant R, Soiza RL. Attitudes of first-year medical students in Singapore towards older people and willingness to consider a career in geriatric medicine. *Ann Acad Med Singapore* 2008;37:947-51. (PMID:19082202).
14. De Visschere L, Van Der Putten GJ, de Baat C, Schols J, Vanobbergen J. The impact of undergraduate geriatric dental education on the attitudes of recently graduated dentists towards institutionalized elderly people. *Eur J Dent Educ* 2009;13(3):154-61. (PMID:19630934).
15. Beling J. Effect of service-learning on knowledge about older people and faculty teaching evaluations in a physical therapy class. *Gerontology and Geriatrics Education* 2003;24(1):31-46. (PMID:15871941).
16. Kaempfer D, Wellman NS, Himburg SP. Dietetics students' low knowledge, attitudes, and work preferences toward older adults indicate need for improved education about ageing. *J Am Diet Assoc* 2002;102(2):197-202. (PMID:11846112).
17. Cankurtaran M, Halil M, Ulger Z, Yavuz B.B, Karaca B, Ariogul S. Influence of medical education on students' attitudes towards the elderly. *J Natl Med Assoc* 2006;98(9):1518-22. (PMID:17019923).
18. Usta YY, Demir Y, Yönder M, Yıldız A. Nursing students' attitudes toward ageism in Turkey. *Archives of Gerontology and Geriatrics* 2012;54(1):90-3. (PMID:21353316).
19. Ayoglu FN, Kulakci H, Ayyildiz TK, Aslan GK, Veren F. Attitudes of Turkish nursing and medical students toward elderly people. *J Transcult Nurs* 2013;25(3):241-8. (PMID:24381117).
20. Fitzgerald JT, Wray LA, Halter JB, Williams BC, Supiano MA. Relating medical students' knowledge, attitudes, and experience to an interest in geriatric medicine. *Gerontologist*. 2003 Dec;43(6):849-55. (PMID:14704384).
21. Turan E, Yanardag M, Metintas S. Attitudes of students of health sciences towards the older persons. *Nurse Educ Today* 2015;S0260-6917(15):00281-6. (PMID:26239278).
22. 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):205-9. (PMID: 21937128).
23. Adkins DM, Mayhew SL, Gavaza P, Rahman S. Pharmacy students' attitudes toward geriatric nursing home patients. *Am J Pharm Educ* 2012;76(5):Article 81. (PMID:22761522).
24. Liu, Y, Norman, I, While, A. Nurses' attitudes towards older people: a systematic review. *Int J Nurs Stud* 2013;50(9):1271-82. (PMID:23265870).
25. Sauer BL. Student-directed learning in a community geriatrics advanced pharmacy practice experience. *Am J Pharm Educ* 2006;70(3):Article 54. (PMID:17136175).