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#### RESEARCH

## CAN AN ELECTIVE GERIATRIC NURSING COURSE CHANGE NURSING STUDENTS' ATTITUDES AND WILLINGNESS IN CARING FOR THE ELDERLY? A QUASI-EXPERIMENTAL DESIGN STUDY

### ABSTRACT

**Introduction:** The elderly population is rapidly growing, and healthcare professionals are currently providing increased care for the elderly. This study was conducted to evaluate the effect of an elective geriatric nursing course on the attitude of students toward the elderly and students' willingness to work with them.

**Materials and Method:** This study was a quasi-experimental. Pretest-posttest design was used. The sample comprised 108 nursing students (46 of the students were educated in an elective geriatric nursing course, 62 were educated in an elective emergency and surgery nursing course). The Student Information Form and Kogan's Attitudes Towards Old People Scale were used. Value, average, percentage frequency distribution, paired t tests, independent t test, McNemar's test, and chi-square test were used.

**Results:** Students who participated in the elective geriatric nursing course developed more positive and less negative attitudes toward the elderly after the course in comparison with students who participated in the elective emergency and surgery nursing course.

**Conclusion:** It is important that the curriculum of the geriatric nursing course should create awareness and knowledge in students regarding care of and attitudes toward the elderly. Adopting a more positive and less negative attitude ensures a higher quality care for the elderly. There is a need to revise the nursing curriculum and develop innovative schemes that will increase the students' willingness to work with the elderly.

**Keywords:** Attitude; Aged; Students; Nursing; Curriculum

#### ARAŞTIRMA

## GERİATRİ HEMŞİRELİĞİ SEÇMELİ DERSİ HEMŞİRELİK ÖĞRENCİLERİNİN YAŞLI BAKIMI KONUSUNDAKİ TUTUM VE İSTEKLİLİĞİNİ DEĞİŞTİREBİLİR Mİ? YARI DENEYSEL BİR ARAŞTIRMA

### Öz

**Giriş:** Yaşlı nüfusu giderek artmakta ve sağlık bakım profesyonelleri yaşlılara daha fazla hizmet verir hale gelmektedir. Bu araştırma, geriatri hemşireliği seçmeli dersinin öğrencilerin yaşlı bakımı konusundaki tutum ve yaşlıyla çalışma istekliliği üzerine etkisini incelemek amacıyla yapılmıştır.

**Gereç ve Yöntem:** Bu çalışma yarı deneyseldir. Ön test son test modeli kullanılmıştır. Örneklem sayısı 108 hemşirelik öğrencisidir (öğrencilerin 46'sı seçmeli geriatri hemşireliği dersini, 62'si seçmeli acil ve cerrahi hemşireliği dersini almıştır). Öğrenci Bilgi Formu ve Kogan Yaşlı İnsanlara Karşı Tutum Ölçeği kullanılmıştır. Ortalama, yüzde frekans dağılımı, iki eş arasındaki farkın önemlilik testi, iki ortalama arasındaki farkın önemlilik testi, McNemar testi, ki kare testi kullanılmıştır.

**Bulgular:** Seçmeli geriatri hemşireliği dersi alan öğrenciler, seçmeli acil ve cerrahi hemşireliği dersi alan öğrencilerle karşılaştırıldığında, ders sonrasında yaşlılara yönelik daha pozitif ve daha az negatif tutum oluşturmuştur.

**Sonuç:** Yaşlılara yönelik tutum ve bakım hakkında farkındalık ve bilgi sağlamak amacıyla hemşirelik müfredatlarının geriatri derslerini içermesi büyük önem taşımaktadır. Daha fazla pozitif daha az negatif tutum sergilemek yaşlılara yönelik daha fazla kaliteli bakım sunulması anlamına gelmektedir. Hemşirelik müfredatının, öğrencilerin, yaşlılarla çalışmak konusunda isteklilik durumlarını arttırmak üzere, yeniden düzenlenmesine ve yenilikçi yaklaşımlara ihtiyaç duyulmaktadır.

**Anahtar sözcükler:** Tutum; Yaşlılık; Öğrenciler; Hemşirelik; Müfredat

## INTRODUCTION

Owing to the increase in the elderly population, healthcare professionals are currently providing increasing care for the elderly population. This trend is expected to increase in the future. Lack of policies and awareness of the necessity and importance of geriatric nursing education and the shortage of geriatric nurses to provide care for the increasing population of elderly patients remains an urgent and important problem (1). There is still no national infrastructure for geriatric nursing in Turkey because geriatric nursing is not considered a specialty. In recent years, although courses in geriatrics care have been organized, there are no approved certification programs available. Ayoglu et al. (2) stated that Turkish students emphasized that their education regarding the care of the elderly was inadequate.

Nurses who have not graduated with a specific level of knowledge about care for the elderly, nevertheless, do come across many elderly individuals or patients at work and must take care of them. The curriculum should thus be designed in order to positively influence the attitude of nursing students toward the elderly. The attitude of healthcare professionals is one of the key factors in providing quality care for the elderly. Many studies have evaluated the attitude of students, who are the future health professionals, toward the elderly (3-6). In their systematic review, Liu et al. (5) reviewed studies published between 2000 and 2011 that investigated the attitude of nurses and nursing students toward the elderly. This systematic review concluded that positive attitudes of nurses and nursing students toward the elderly had decreased slightly since 2000.

Students who have a more negative attitude toward the elderly are negatively affected in terms of their willingness to work with the elderly in the future, and the number of people wanting to work with the elderly is decreasing in the healthcare industry, although there is a greater need for such people (7). Willingness to work with the elderly is closely related to having a positive attitude (5,8,9).

There are studies showing that attitude toward the elderly is affected by education (7,10-12). The

results of these studies have been interpreted to indicate that nursing students are positively affected by this education. These results, therefore, suggest that adjustments must be made to geriatric education, and the curriculum must be enriched with better information to improve teaching skills and practices that meet the needs of the elderly and improve the quality of their care (3-6,9). Many nursing schools in Turkey do not have any geriatrics courses, but a limited number of schools do offer elective geriatrics courses. There have been no studies in Turkey evaluating the effect of elective geriatric nursing courses. For this reason, the present study was conducted to evaluate the effect of an elective geriatric nursing course on the attitude of students toward the elderly and students' willingness to work with them.

## MATERIALS AND METHOD

A quasi-experimental pretest-posttest design was used.

### Sample

The sample consisted of a total of 155 students, who were 2<sup>nd</sup> year students at a university faculty of nursing and took either the geriatric nursing (n=52) or emergency nursing and surgery nursing (n=103) course as an elective. Students who volunteered to participate (n=129) constituted the subjects for this study.

### Education program

The geriatric nursing course was taught for 14 weeks, for two hours once a week. Topics included in the syllabus were: changes in society and the place of the elderly in a changing society, understanding changes that come with aging, psychosocial aspects of aging, syndromes/complications frequently associated with aging, and the perception of aging in society. A local "Awareness Center" operated by the municipality, was visited as part of the curriculum to enable them to empathize with elderly people who have physical disabilities. Students participated in simulation studies in order to understand the physical disabilities experienced by the elderly.



Students also visited a government-run nursing home to interact with the elderly. In the emergency and surgery nursing course, which was selected to be the control group, no topics related to care for the elderly were discussed.

### **Instruments**

The Student Information Form and Kogan's Attitudes Towards Old People Scale were used.

#### **Student information form**

The form was prepared to obtain socio-demographic information about the students in the sampling group and data that can affect their attitudes toward the elderly (age, gender, living with elderly people, giving care to the elderly, willingness to work with elderly after graduation).

#### **Kogan's Attitudes Towards Old People Scale**

Kogan's Attitudes Towards Old People Scale is a tool that has been used to evaluate attitudes toward the elderly for more than 50 years. The systematic review by Neville (6) investigated eight different scales used in 42 different studies published between 2008 and 2013 to examine the attitudes of nursing students toward the elderly. Among these scales, Kogan's scale was described as the most trusted and frequently used scale for measuring attitudes toward elderly people.

The Kogan's scale is a six-point Likert scale consisting of 34 items. The scale contains 17 positively and 17 negatively worded items about the elderly. The negative statements are reverse-scored to attribute more positive attitudes to a higher score. The minimum and maximum scores obtained from Kogan's scale are 34 and 238, respectively. Higher scores indicate a positive attitude toward the elderly, and lower scores indicate the opposite. In Kogan's original study, the total-item correlation of the scale was between 0.1 and 0.7, in the Turkish version of the scale, Cronbach's alpha reliability coefficient was found to be 0.89 (13).

### **Procedure**

Data were collected between February and June 2017 for the 2016/2017 academic year. Data were collected at predetermined times and dates set by

the course coordinators within this 14-week period (the first and last two weeks). In order to not influence how students filled the form, the third author was responsible for collecting the data from the students on the geriatrics course because the first two authors were faculty members teaching the course. Students were informed about the research by the third author, and consent forms were signed by the students who had volunteered to participate. Because the forms were going to be filled again in the last two weeks of the course, pseudonyms were used in order to conceal the identity of the students.

### **Statistical analysis**

Data analysis was performed by the researchers using the SPSS 22.0 software. Value, average, and percentage frequency distribution were examined. Pre- and posttest changes were assessed using paired *t* tests because the data were normally distributed. An independent *t* test was used to compare the variables between the elective course groups. The students' willingness to work with the elderly before and after taking the elective geriatric nursing course was examined using the McNemar's test. The results were evaluated using a 95% confidence interval, and  $p < 0.05$  was considered statistically significant.

### **Ethical considerations**

Approval to conduct the research was obtained from X Faculty of Nursing and X University Ethical committee (3134-GOA-2017/03-06). Oral and written information was given to the nursing students prior to the study. Written consent was obtained from all students.

## **RESULTS**

A total of 155 students registered for these elective courses, and the first study data collected comprised results from 129 students (83%). The second and final data group comprised results from 108 students (70%).

The average age was 20.24 years (1.07) for students enrolled in the geriatric nursing course and 20.57 years (0.85) for students enrolled in the emergency nursing and surgery nursing course. More than half

of the students (79%) were female. More than half of the students (69.8%) had previous experience living with an elderly person. When the first data from both groups were compared, it was found that in terms of variables both groups were similar (Table 1).

There were no significant differences found in the baseline data from both groups when positive and negative attitudes of students toward the elderly were compared (Table 2). According to the baseline data from both groups, the average positive attitude scores were higher than the average negative attitude scores (Table 2). When posttest results were compared, there was a significant difference between the groups in terms of the average negative attitude scores ( $p=0.016$ , Table 2). The average negative attitude scores significantly decreased among the students who took the elective geriatric nursing course, whereas the positive attitude scores remained the same for both groups ( $p=0.666$ , Table 2).

The average attitude scores of the students who took geriatric nursing as an elective course were compared before and after taking the course. The average positive attitude scores of the students showed a significant difference ( $p=0.034$ ) indicating that the course had a positive impact on the attitude of students. The average negative attitude scores of students showed an extremely significant difference ( $p<0.001$ ), and the negative attitude of students toward the elderly decreased after taking the course.

The average attitude scores of students who took emergency nursing and surgery as an elective course were compared before and after taking the course, and no significant differences were found (Table 3).

Students' willingness to work with an elderly person after graduation was examined with McNemar's test, and no differences were found in both groups (Table 4).

**Table 1.** Sociodemographic characteristics of the participants.

Variable	Elective geriatric nursing course (n:49)	Elective emergency and surgery nursing course (n:80)	t value	p value
		<b>Mean (sd)</b>		
<b>Age (years)</b>	20.24 (1.07)	20.57 (0.85)	-1.93	.056 <sup>a</sup>
<b>Gender</b>	<b>n (%)</b>	<b>n (%)</b>		
Female	36 (73.5)	66 (82.5)	1.001 <sup>b</sup>	.317
Male	13 (26.5)	14 (17.5)		
<b>Living with elderly people</b>	<b>n (%)</b>	<b>n (%)</b>		
Yes	36 (73.5)	54 (67.5)	.269 <sup>b</sup>	.604
No	13 (26.5)	26 (32.5)		
<b>Giving care to the elderly</b>	<b>n (%)</b>	<b>n (%)</b>		
Yes	23 (46.9)	40 (50.0)	.024 <sup>b</sup>	.876
No	26 (53.1)	40 (50.0)		
<b>Willingness to work with elderly after graduation</b>	<b>n (%)</b>	<b>n (%)</b>		
Yes	34 (69.4)	46 (57.5)	1.353 <sup>b</sup>	.245
No	15 (30.6)	34 (42.5)		

Abbreviations: sd, standard deviation <sup>a</sup>:  $p > .05$ , <sup>b</sup> yates correction



**Table 2.** Comparison of dependent variables between groups at baseline and post test.

	Baseline		t	p
	Elective geriatric nursing course (n=49)	Elective emergency and surgery nursing course (n=80)		
		Mean (sd)		
Positive attitudes scores	72.39 (10.46)	73.14 (11.35)	-.375	.708 <sup>a</sup>
Negative attitudes scores	63.77 (8.35)	65.17 (11.54)	-.738	.462 <sup>a</sup>
		Mean (sd)		
	(n=46)	(n=62)		
		Mean (sd)		
Positive attitudes scores	76.93 (10.33)	76.03 (10.99)	.433	.666 <sup>a</sup>
Negative attitudes scores	57.83 (10.06)	63.16 (12.03)	-2.439	.016 <sup>b</sup>

t value: independent samples t test <sup>a</sup>: p > .05, <sup>b</sup>: p<.05

**Table 3.** Dependent variable scores at pretest and post test.

Instrument	Elective geriatric nursing course (n=46)		Elective emergency and surgery nursing course (n=62)	
	Pretest Mean (sd)	Post-test Mean (sd)	Pretest Mean (sd)	Post-test 1 Mean (sd)
Positive scores of KOGAN	73.00 (10.46)	76.93 (10.33)	73.83 (11.41)	76.03 (10.99)
T value (p)	-2.190 (.034) <sup>a</sup>		-1.614 (.112)	
Negative scores of KOGAN	64.10 (8.29)	57.83 (10.06)	63.87 (10.52)	63.16 (12.03)
T value (p)	4.207 (<.001) <sup>b</sup>		.442 (.660)	

T value: paired samples t test

<sup>a</sup> p<.05

<sup>b</sup> p<.001

Pretest, baseline measurement beginning of the semester; post-test, ending of the semester

**Table 4.** Participants' willingness to work with an elderly person after graduation.

Elective geriatric nursing course				
Baseline	Post test		Total	
	Yes	No		
Yes	30	4	34	
No	9	3	12	
<b>Total</b>	39	7	46	

  

Elective emergency and surgery nursing course				
Baseline	Post test		Total	
	Yes	No		
Yes	30	6	36	
No	4	22	26	
<b>Total</b>	34	28	62	

$\chi^2$  McNemar Test was used, binominal distribution used.  $p=.146$  for students who participate the elective geriatric nursing course,  $p=.754$  for students who participate the elective emergency and surgery nursing course

## DISCUSSION

Elderly people avail healthcare services more frequently, which increases demand for skilled nursing. Along with the increasing need for care of the elderly, there is an increasing need for nurses providing care for the elderly. Although the increase in the need for care for the elderly is an immediate concern, nursing education is not developed well enough to meet this need (2). Ayoglu et al. (2) stated that Turkish students emphasized that their education regarding the care of the elderly was inadequate.

The present study has indicated that taking a geriatric nursing course as an elective course had a positive effect on the attitude toward the elderly and was particularly effective in decreasing the negative attitude of students. These results correspond with those of previous studies, which show that educational programs of study prepared for students are effective in increasing positive attitudes toward the elderly (12,14,15).

Students in both groups were similar in terms of the variables that can affect attitudes toward the elderly. Both groups were of similar ages and similar in variables such as living with an elderly person and providing care for the elderly. The reason for the higher baseline data in terms of students' positive attitudes is thought to originate from Turkish culture. The results of the present study show similarity with other studies conducted in the same cultural environment (2, 10). Respect for the elderly is an important aspect of Turkish culture. Attitudes are mostly formed within the family. In both groups, more than half of the students had previous experience of living with an elderly person. The higher baseline data for students' positive attitude in both groups is thought to have arisen from previous experiences of living with an elderly person. Additionally, at the end of the semester, the students who took the elective course said that they had been affected in a very positive way, particularly after visiting the nursing home and Awareness



Center. Students' positive attitude average scores may have changed as a result of the course they took and the two institutions they visited.

Average attitude scores were almost the same among the students who participated emergency and surgery nursing as an elective course, and their positive attitudes slightly increased, whereas their negative attitudes slightly decreased. This change was thought to originate from the practical experience of students during their medical surgical nursing course. Students practiced at the internal medicine and surgery clinic of the university hospital, where there were many elderly patients. It is thought that the attitude scores of students may have been slightly affected because of their experience of working with the elderly.

Along with the increasing number of elderly people in need of care, the number of nurses willing to work with the elderly should also be considered. Willingness to work with an elderly person is a much-debated topic in literature. According to the results of Ayoglu et al. (2) 66.6% of students stated that they were willing to work with elderly people after graduation. Darling et al. (16) found that more than half of the students (55%) stated that they were willing to work with the elderly. When the results from Turkey are compared with those from other countries, it was seen that Turkish nursing students are more willing to work with elderly people. It is believed that this result reflects the positive attitude toward the elderly that is present in Turkish society. Social norms have important roles in shaping attitudes.

In a qualitative study conducted by Gould et al. (17) about nursing students' opinions of geriatric nursing, it was concluded that students did not want to work with the elderly after their graduation. It was stated that this result originated from negative thoughts such as geriatric nursing is less prestigious in the eyes of other nurses or that it does not require a special knowledge set. According to results of a study conducted by Rathnayake et al. (8), students were unwilling to work with the elderly. They based

their decision on various reasons such as not having enough experience working with the elderly, having trouble communicating with elderly people, and that working with the elderly is boring and depressing. In literature, inadequate number of academic staff in the field of geriatrics has also attributed to the unwillingness of students to work with the elderly (18). In the present study, although there are no statistically meaningful results regarding students' willingness to work with the elderly before and after their education, the increase in the number of students who want to work with the elderly after their graduation is a promising result.

In conclusion, geriatric nursing as an elective course increased the positive attitude and decreased the negative attitudes of students toward the elderly. In order to provide better care for the elderly, it is important that graduates adopt a positive attitude toward them and develop an interest for geriatric nursing. Adopting a more positive and less negative attitude ensures higher quality care for the elderly. Therefore, it is recommended that nationally credited and structured geriatric education programs should be developed in nursing schools. Students stated that they were positively influenced by their visits to nursing homes and Awareness Centers. For this reason, the curricula of geriatric nursing courses should be enriched with practical courses and simulations. Undergraduate and graduate level geriatric nursing certificate programs should be initiated. There is also a need for innovative schemes that will increase the students' willingness to work with the elderly. It is believed that willingness to work with the elderly can be further increased, particularly through practical courses. Culture can be an important factor in curriculum studies. For this reason, cultural heritage can be used as a resource to help students understand elderly people better and socialize with them more positively.

#### **Conflicts of interest**

The authors declare no conflict of interest.

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