

Evaluation of Attitudes of Nursing Students Taking Internal Medicine Course Towards E-Learning

İç Hastalıkları Dersi Alan Hemşirelik Öğrencilerinin E-Öğrenmeye Yönelik Tutumlarının Belirlenmesi

Neşe Kıskaç[✉], Mahruk Rashidi[✉], Funda Karaman[✉], Gülay Yıldırım[✉]

ABSTRACT

Objectives: In this study, it was aimed to determine the attitudes of nursing students who take internal medicine lessons towards e-learning.

Methods: The research was descriptive. Data were collected from 233 nursing students taking internal medicine courses by questionnaire method. SPSS program was used for statistical analysis.

Results: The scale total score of the students was high (30.25±8.99). There was no relationship between the scale total score and gender and academic status ($p>0.05$). There was a relationship between the scale score and the status of choosing the nursing profession ($p<0.05$). The e-learning attitudes of students who willingly chose the nursing profession were found to be higher than other students.

Conclusion: It was found that the e-learning attitudes of nursing students who took internal medicine lessons were high. The results of this study show that internal medicine courses that can be given via e-learning can be added to the education curriculum. However, the e-learning conditions of the students should be provided to the same extent. This research contributes to the studies on adding e-learning to nursing curriculum.

Keywords: E-Learning, Internal Medicine, Nursing, Student

ÖZ

Amaç: Bu çalışmada dahiliye dersi alan hemşirelik öğrencilerinin e-öğrenmeye yönelik tutumlarının belirlenmesi amaçlanmıştır.

Yöntem: Araştırma tanımlayıcı yapıldı. Veriler dahiliye dersi alan 233 hemşirelik öğrencisi ile anket yöntemiyle toplanmıştır. İstatistiksel analizde SPSS programı kullanıldı.

Bulgular: Öğrencilerin ölçek toplam puanı yüksek düzey (30.25±8.99) belirlendi. Ölçek toplam puanı ile cinsiyet ve akademik durum arasında ilişki yoktu ($p>0.05$). Ölçek puanı ile hemşirelik mesleğini seçme durumu arasında ilişki bulundu ($p<0.05$). Hemşirelik mesleğini isteyerek seçen öğrencilerin e-öğrenme tutumları diğer öğrencilere göre daha yüksek bulunmuştur.

Sonuç: Dahiliye dersi alan hemşirelik öğrencilerinin e-öğrenme tutumlarının yüksek olduğu saptanmıştır. Bu çalışmanın sonuçları, e-öğrenme yoluyla verilebilecek dahiliye derslerinin eğitim müfredatına eklenebileceğini göstermektedir. Ancak öğrencilerin e-öğrenme koşulları da aynı ölçüde sağlanmalıdır. Bu araştırma, e-öğrenmenin hemşirelik müfredatına eklenmesine yönelik çalışmalara katkı sağlamaktadır.

Anahtar kelimeler: İç Hastalıkları, E-Öğrenme, Hemşirelik, Öğrenci

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N. Kıskaç

Department of Nursing, Faculty of Health Sciences, İstanbul Gelişim University, İstanbul, Türkiye
✉ nkiskac@gelisim.edu.tr

ORCID: 0000-0003-3058-6201

M. Rashidi 0000-0002-6645-2427

Department of Nursing, Faculty of Health Sciences, İstanbul Gelişim University, İstanbul, Türkiye

F. Karaman 0000-0002-4177-9247

Department of Nursing, Faculty of Health Sciences, Biruni University, İstanbul, Türkiye

G. Yıldırım 0000-0003-1164-3274

Department of Nursing, Keşan Hakkı Yörük School of Health, Trakya University, Edirne, Türkiye

INTRODUCTION

E-learning is all educational activities carried out through electronic devices⁽¹⁾. Individuals can perform E-learning synchronously as well as asynchronously. While simultaneous learning is learned through chat and video conferencing, in asynchronous learning, after a training is published online, it can be learned by accessing it via web, e-mail and message⁽²⁻⁴⁾. E-learning has advantages as well as disadvantages. Its advantages are ease of access to information, rapid evaluation and conclusion, flexibility in place and time, cost-effectiveness, access to many students with few instructors, allowing self-learning, increasing satisfaction and reducing stress⁽⁵⁻⁸⁾. The disadvantages are that the lack of social life, causing lack of communication, easier cheating in exams, unauthorized copying and publishing of data and internet disconnections problems with overloaded use^(5,8).

Nursing is a health discipline that uses technical knowledge, skills and evidence-based medical practices, requires the implementation of patient diagnosis, planning, implementation and evaluation processes, and requires the acquisition of the ability to manage risks in problems that may occur^(9,10). In the nursing profession, where face-to-face education is important, The importance of using technology is increasing day by day. Especially in the developing world, rapid changes in health care, expectations for increasing the quality of care and the desire to obtain information increase the importance of technology use^(11,12). Especially in the extraordinary situations experienced in recent years, all educational institutions and higher education institutions have provided distance education and transferred their educational content to digital media⁽¹³⁾. In many countries around the world, it is seen that e-learning has been added to the nursing education curriculum⁽¹⁴⁾.

When the studies on e-learning are examined, in the study Abbasi et al.⁽¹⁵⁾, it was found 77% of 382 medical students had a negative perception of e-learning. In another study conducted by Anwar et al., the e-learning readiness levels of 283 medical and dental students were examined and found to be high. In addition, it was emphasized that it is important to continue the lessons online in order to achieve success with e-learning⁽¹⁶⁾. In the study by Dyrek et al.⁽¹⁷⁾, with 615 medical students, it was found that students evaluated the theoretical courses given with

e-learning as good, while they evaluated the clinical courses given with e-learning as bad. In another study, Elzainy et al.⁽¹⁸⁾ found that especially female students' achievement and satisfaction increased. In the study carried out by Bani Hani et al.⁽¹⁹⁾ found that 65.5% of 1000 medical students were satisfied with e-learning. Kabir et al.⁽²⁰⁾ reported that 43.6% of 237 nursing students preferred e-learning, Mousseau et al.⁽²¹⁾, in the study with 201 medical students, found that there was no difference between face-to-face learning and e-learning in diagnosis, and e-learning could be preferred.

In the literature, it is seen that the majority of the studies were conducted with non-nursing students during the pandemic period, and the studies conducted with nursing students are limited. For this reason, it was aimed to determine the attitudes of nursing students taking internal medicine courses towards e-learning in our country, where face-to-face education was started. It was thought that the results of this study would give an idea to the studies to be conducted on the organization of the nursing education curriculum.

METHODS

Study design

The research was descriptive

Study area and population

The study was conducted at a university in Istanbul between 19.01.2023-28.03.2023. The sample of the study consisted of 233 students who accepted to participate in the study in the nursing department taking internal medicine courses.

Data collection

Personal Information Form and Attitude Scale towards E-learning were used to collect the data. Data were collected online.

Personal information form

The form included 3 questions about the characteristics of individuals (gender, academic achievement, how they choose the nursing profession).

Attitude scale towards e-learning

The scale was first developed by Zabadi and Al-Alawi in 2016⁽²²⁾. The validity and reliability of the scale were carried out by Guillasper et al., in 2020⁽²³⁾. In our country, in 2022, Its validity and reliability were

conducted by Aydın et al. (24). The scale consists of 9 items. The scale is 5-point Likert type. Only the 9th item of the scale is reverse scored. The lowest 9 and the highest 45 points are obtained from the scale. The higher the score, the more positive the e-learning attitudes of the students. Cronbach's alpha was found to be 0.917 in the study by Guillasper et al. and 0.913 in the study by Aydın et al. (23,24). In this study, it was found to be 0.910.

Data analyses

In the analysis of the research data, analyzes were applied using the SPSS program, and the significance level was taken as 0.05. Before determining which tests to use, the normality test was performed. A normality test determines whether a sample data has been drawn from a normally distributed population. Since the data had not normal distribution, Mann Whitney U test and Kruskal Wallis analysis were used.

Ethical considerations

Ethical committee approval was obtained from the Human Research Ethics Committee of İstanbul Gelişim University with the decision dated dated 18.01.2023 and numbered 2023-02-43, in line with the principles of the Declaration of Helsinki, to carry out the study. In addition, necessary permissions for the measurement tools used in the research were obtained from the authors. The students who participated in the research were verbally informed about the purpose of the study, the confidentiality of their information, and their verbal and written consents were obtained.

RESULTS

66.1% of the students were female, 61.4% had good academic achievement and 46.4% chose the nursing profession willingly (Table 1).

The total score of the Nursing students' Attitude Scale towards E-Learning was found to be 30.25±8.99 (Table 2).

There was no relationship between the total scale score and gender and academic achievement status of the students ($p>0.05$). A relationship was found between the total score of the scale and the way of choosing the nursing profession ($p<0.05$) (Table 3). The scale score of those who chose the nursing profession willingly was higher than the others.

Table 1. Personal Characteristics of Students (n=233)

	Personal Characteristics	N	%
Gender	Female	154	66.1
	Male	79	33.9
Academic Achievement Status	Upper	143	61.4
	Middle	84	36.1
	Lower	6	2.6
How Chose Nursing Profession	Voluntarily	108	46.4
	By chance	36	15.5
	By Suggestion	66	28.2
	Other	23	9.9

Table 2. The total score of the Nursing students' Attitude Scale Towards E-Learning (n=233)

Attitude Scale Towards E-Learning	Mean±sd
Total	30.25±8.99

Table 3. Relationship Between Personal Characteristics of Participants and Total Scale Score (n=233)

Personal Characteristics	Mean rank	χ^2 / Z	p	
Gender	Female	112.19	Z=-1.52	0.12
	Male	126.37		
Academic Achievement Status	Upper	114.34	$\chi^2=1.93$	0.38
	Middle	119.03		
	Lower	152.08		
How Chose Nursing Profession	Voluntarily	100.28	$\chi^2=15.70$	0.00*
	By chance	140.74		
	By Suggestion	134.08		
	Other	109.35		

p <0.05 (Mann Whitney U and Kruskal Wallis tests were used)*

DISCUSSION

It is known that e-learning was used and experienced most actively during the pandemic period in the world. E-learning is an alternative option for students not to be deprived of their education rights in emergencies such as pandemics and disasters. Especially in this period, a lot of study has been done on this subject. These studies have brought with them discussions about adding e-learning to classical learning outside of emergencies and placing it in the curriculum. Since the education process of the nursing profession is skill-based and practice-oriented, it is important to ensure that students learn and receive education correctly with the e-learning method.

Students' attitudes towards e-learning were found to be high (30.25±8.99) (Table 2). Similar to this study, Zabadi and Al-Alawi found that university students

exhibited high positive attitudes towards e-learning⁽²²⁾. Likewise, medical students were found to be satisfied with e-learning during the pandemic period⁽¹⁹⁾. In the study, conducted by Regmi and Jones, it was found that e-learning in health science education has the potential to improve students' knowledge level and performance⁽²⁵⁾. In Turkey, in the study conducted by Güven and Sönmez with 434 nursing students, it was determined that student nurses had moderately positive attitudes towards e-learning⁽²⁶⁾. In contrast to this study, Sanchez and Karaksha emphasized in their study that nursing students have negative thoughts about e-learning⁽²⁷⁾. In another study, Al-Smadi et al.⁽²⁸⁾ found that students studying in higher education have low e-learning education satisfaction. It was determined that more than half of the medical and nursing students had negative thoughts and attitudes towards e-learning during the pandemic period^(15,29-31). In the studies conducted with nursing students, it was seen that there were both positive and negative thoughts about e-learning. In the literature, it is seen that this issue is controversial and there is a need for more studies, systematic and meta-analysis studies on the subject. This study is consistent with studies showing a high level of positive attitude and contributes to this controversial issue.

At the same time, it was determined that the scale score of the students who chose the nursing profession willingly was higher ($p < 0.05$) (Table 3). No studies were found in the literature comparing this parameter with e-learning attitudes. Denat found that those who voluntarily choose the nursing profession are more open to learning and have less learning anxiety⁽³²⁾. These characteristics of students who choose the profession willingly may cause high e-learning attitudes.

The limitation of the study is that it was conducted in a single university. With the onset of the pandemic all over the world and in our country, universities in our country switched to distance education. After a while, universities that started face-to-face education started distance education again with the earthquake in our country. It is important to know the advantages and disadvantages of e-learning in universities that have switched to distance education for a long time, especially in professions dealing with health. This study contributed to the literature in showing the positive and negative outcomes of e-learning.

CONCLUSION

The e-learning attitudes of nursing students who took internal medicine lessons were found to be high. Assessing opinions towards e-learning is very important to ensure that students receive the right learning and education. It is thought that this study sheds light on the discussions about the transition to e-learning in the nursing education curriculum and contributes to the path to be followed.

Author contribution

Study conception and design: NK; data collection: NK, MR; analysis and interpretation of results: NK, FK; draft manuscript preparation: NK, MR, and GY. All authors reviewed the results and approved the final version of the manuscript.

Ethical approval

The study was approved by the Human Research Ethics Committee of İstanbul Gelişim University (Protocol no. 2023-02-43/18.01.2023).

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Conflict of interest

The authors declare that there is no conflict of interest.

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