

## Araştırma makalesi

## Research article

## Nursing Students' Views and Suggestions Regarding the Disability-Friendly Nursing Education Curriculum: A Mixed Method Research

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## ABSTRACT

**Aim:** The aim of this study is to determine the views and suggestions of nursing students attending different universities in Türkiye regarding disability-friendly nursing education.

**Material and Methods:** This convergent mixed methods design research was conducted between 1 May and 1 September 2020. The research sample consisted of 830 students studying in the nursing departments of 61 different universities. In order to collect the data for the study, the researchers created an online questionnaire asking nursing students questions about the disabled-friendly framework of the nursing education they received. The Chi-Square Test was used to compare the findings of students' views and thoughts on nursing education with some variables. The answers to the open-ended questions were analysed by content analysis.

**Results:** The study participants are women at the rate of 83.3%. It has been found that the state of having sufficient knowledge about nursing care for the health of persons with disabilities impacts the students' thinking that their nursing education is disabled-friendly (p <.001).

**Conclusion:** As a result of this research, most of the nursing students in Türkiye did not evaluate the education they received as disabled-friendly, and a large part of the students stated that they wanted to be educated on disability-related issues.

**Keywords:** Baccalaureate nursing education, curriculum, disability-friendly

## ÖZ

**Hemşirelik Eğitimi Müfredatının Engelli Dostu Olmasına İlişkin Hemşirelik Öğrencilerinin Görüşleri ve Önerileri: Bir Karma Yöntem Araştırması**

**Amaç:** Bu çalışmanın amacı, Türkiye'de farklı üniversitelerde öğrenim gören hemşirelik öğrencilerinin hemşirelik eğitimi müfredatının engelli dostu olmasına ilişkin görüşlerini ve önerilerini belirlemektir.

**Gereç ve Yöntem:** Eş zamanlı karma yöntemler araştırması olan bu çalışma, 1 Mayıs-1 Eylül 2020 tarihleri arasında gerçekleştirildi. Araştırmanın örneklemini 61 farklı üniversitenin hemşirelik bölümlerinde öğrenim gören 830 öğrenci oluşturdu. Araştırmanın verilerini toplamak için araştırmacılar tarafından hemşirelik öğrencilerine aldıkları hemşirelik eğitiminin engelli dostu çerçevesi hakkında sorular soran çevrimiçi bir anket oluşturulmuştur. Öğrencilerin hemşirelik eğitimi ile ilgili görüş ve düşüncelerine ilişkin bulguların bazı değişkenlerle karşılaştırılmasında Ki-Kare Testi kullanıldı. Açık uçlu soruların yanıtlarının değerlendirilmesinde içerik analizi kullanılmıştır.

**Bulgular:** Araştırmanın katılımcıları %83.3 oranında kadındır. Engelli bireylerin sağlığına yönelik hemşirelik bakımı konusunda yeterli bilgiye sahip olmanın öğrencilerin hemşirelik eğitiminin engelli dostu olduğunu düşünmelerinde etkili olduğu (p <.001) bulunmuştur.

**Sonuç:** Bu araştırma sonucunda Türkiye'deki hemşirelik öğrencilerinin çoğu aldıkları eğitimi engelli dostu olarak değerlendirmemekte ve öğrencilerin büyük bir kısmı engellilik ile ilgili konularda eğitim almak istediklerini belirtmektedir.

**Anahtar kelimeler:** Engelli dostu, hemşirelik lisans eğitimi, müfredat

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## INTRODUCTION

Disability is an overarching concept used to indicate the deterioration of the individual's adaptation to his environmental and personal conditions, the limitation of his activity, and the restriction of his participation in social life<sup>1</sup>. Although the concept of disability generally connotes individuals with vision, hearing, or orthopaedic problems, it also includes individuals with cerebral palsy, dementia or limb loss, etc<sup>2</sup>. According to the World Health Organization (WHO), about 15% of people in the world live with some form of disability. This rate means at least one billion people and is increasing<sup>3</sup>. Although disability covers a significant proportion of the world's population, the policies developed for persons with disabilities are insufficient, and this affects the extent of inequalities faced by persons with disabilities in the use of health services<sup>2,3</sup>.

The WHO indicates that health workers have insufficient knowledge and competence about disability as one of the reasons for the inequalities faced by people with disabilities in the field of health<sup>4</sup>. Studies conducted with healthcare professionals point to negative attitudes towards disability as well as insufficient knowledge among healthcare professionals and show that most healthcare professionals evaluate disability within the framework of the medical model<sup>5-9</sup>. According to Gonzalez and Hsiao (2020), disability is handled mainly within the framework of the medical model in nursing education, and individuals with disabilities are not considered as a diversity of society<sup>10</sup>.

The fact that nurses are the largest group in the health workforce increases the rate of encountering individuals with disabilities compared to other healthcare professionals. This situation makes nurses a leading profession in meeting the health needs of people with disabilities<sup>11</sup>. However, studies have shown that nurses do not have enough knowledge to care for people with disabilities<sup>11-15</sup>. A study examining nurses' knowledge, attitudes, and behaviours towards hearing-impaired patients showed that nurses lack knowledge and education about caring for these patients<sup>12</sup>. In different studies, it has been revealed that nurses feel inadequate in determining the needs of individuals with intellectual disabilities<sup>13-14</sup>. Kiliç and Çitil (2019) found in their research that the nurses' awareness about the practices related to persons with disabilities in the hospital they work at is low<sup>15</sup>. These studies on nurses lead to questioning the scope of nurses' pre-graduate education on disability<sup>11,15</sup>.

The content of the undergraduate nursing education curriculum is essential for training nurses who will contribute to solving the problems of persons with disabilities<sup>11</sup>. The American Academy of Colleges of Nursing (2008) considers disability within the concept of human diversity and draws attention to the fact that the care of persons with disabilities is included in the undergraduate education of nurses<sup>16</sup>. However, studies on nursing education in different countries show that the curriculum of undergraduate nursing education is limited to disability. In a study examining the content of intellectual disability in the curriculum of nursing schools in Australia, it was shown that

more than half of the schools do not have content related to intellectual disability in their curriculum<sup>17</sup>. Similarly, it is stated that there is a lack of content related to disability in nursing education programs in the USA<sup>18</sup>.

The limitations on disability-related issues in the undergraduate nursing curriculum are also reflected in the knowledge and attitudes of nursing students. Polikandrioti et al. (2020) found in their research that most nursing students had no experience with a person with a disability before their graduation<sup>19</sup>. Several studies have shown that students' positive attitudes towards people with disabilities are low<sup>20-25</sup>. A study found that nursing students had less positive attitudes toward physical disability than medical students<sup>25</sup>. It is seen that the inclusion of disability in the undergraduate nursing curriculum is necessary for students to have awareness and positive attitudes toward people with disabilities<sup>26</sup>.

In the National Core Nursing Education Program (HUÇEP) (2014), where the nursing undergraduate education curriculum is largely taken as a reference in Türkiye, the disability is mentioned under the expression "Communication in Special Situations (child, the elderly, persons with physical disability, inappropriate reaction) included under the title heading "Communication and interpersonal relations"<sup>27</sup>. When the nursing education studies on disability in Türkiye are examined, it is seen that students' attitudes toward persons with disabilities are mostly measured<sup>21-23,28</sup>. However, no study in the literature evaluates the nursing students' views and suggestions regarding disabled-friendly nursing education curricula. In this context, assessing nursing students' views and suggestions regarding the content of disability in their nursing education will make an important contribution to the nursing education literature.

### Aim

The aim of this study is to determine the views and suggestions of nursing students attending different universities in Türkiye regarding disability-friendly nursing education. In this research, the concept of 'disabled-friendly' is considered an approach toward people who accept disability as a human diversity<sup>2,29-32</sup>. The results of this research can contribute to the nursing academicians' organization of nursing education content within a disability-friendly framework.

### Research Questions

1. What are the views of nursing students regarding their disabled-friendly nursing education?
2. What are the suggestions of nursing students to make nursing education disabled-friendly?

## METHODS

### Study Design

This convergent mixed methods design research was conducted between 1 May and 1 September 2020.

### Study Sample

The study population consisted of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> grade students in undergraduate nursing programs in Türkiye. There are nursing departments in 135 different universities in Türkiye, and a total of 86 thousand 415 nursing students

are educated<sup>33,34</sup>. The sample of this study was determined as improbable, and it was tried to reach the maximum number of nursing students studying at different universities in Türkiye. Nursing students from 61 different universities studying at the university's nursing department, participated in the research carried out with the Google form. The research was completed with 830 nursing students who responded to the Google form.

In order to reach the participants, the Turkish Nurses Association Student Commission, which operates in Türkiye, was interviewed within the scope of the research. Turkish Nurses Association Student Commission is a nursing student organization with representatives in 67 universities in 44 provinces of Türkiye within the Turkish Nurses Association<sup>35</sup>. It was ensured that the university representatives of the Turkish Nurses Association Student Commission made research announcements in the student WhatsApp groups of their own universities.

#### Variables of the Research:

**Dependent variables:** Nursing students' views and suggestions regarding the disability-friendly nursing education curriculum

**Independent variables:** Participants' gender, grade, condition of having a disability, knowledge about some issues related to the health of persons with disability.

#### Data Collection Tools

The data were collected with the *Socio-demographic Information Form* and *Disabled-Friendly Nursing Education Evaluation Questionnaire*.

**Socio-demographic Information Form:** Socio-demographic information form consists of 7 questions questioning the socio-demographic characteristics of the participants. In the form, questions on the university where the participants studied, the status of having a disability, the status of having a relative with a disability, etc. were included<sup>18-20</sup>.

**Disabled-Friendly Nursing Education Evaluation Questionnaire:** This form consists of 25 questions that evaluate nursing education in terms of being disability-friendly. The questions were developed by the researchers using the literature<sup>10,18,26,35,36</sup>. In the form, the nursing students were asked questions about the institution's activities where students receive education for persons with disabilities and the content of the nursing education students receive for persons with disabilities. The answers to the questions in the form are "yes", "no" and "partially". Numbers and percentages were used in the evaluation of the form. There is no scoring in the form, and the questions were evaluated independently. The answers given by the participants to each statement are shown in the table as percentages. In addition, an open-ended question was included in the form in which students were asked their suggestions regarding disability-friendly nursing education. While developing the form, the opinions of 3 experts (2 public health nursing and one nursing education) were consulted. The content validity index of the form is 0.93.

#### Data Collection

In order to collect the data for the study, the researchers created an online questionnaire asking nursing students

questions about the disabled-friendly framework of the nursing education they received<sup>20-26</sup>. Google Forms was used to create the survey. On the front of the research form, there is a statement about the purpose of the research and participation voluntariness. Participants approved this field and then accessed the questions in the form. It took an average of ten minutes for the participants to complete the form. The survey link was shared in student WhatsApp groups through the Turkish Nurses Association Student Commission representatives. The students shared the survey link with the student groups in the nursing school they represent so that the students were reached with the snowball sampling method. In order to reach more participants, sharing the form was preferred in WhatsApp groups, which are actively used.

#### Data Analysis

Data were analysed by transferring them to IBM SPSS Statistics 20. Numbers, percentages, and mean were used for all descriptive variables in the analysis. The Chi-Square Test was used to compare the findings of students' views and thoughts on nursing education with some variables. The significance level of the research was taken as  $p < 0.05$ . The answers to the open-ended questions were analysed by content analysis.

#### Ethical Considerations

Before conducting the study, ethical approval (Decision date: 23 June 2020, Decision no: 2020/387) was obtained from a university's Social and Human Sciences Research Ethics Committee. On the front of the online questionnaire, there is an explanation text about the purpose of the research, the confidentiality of the data, and the volunteering of participation. On the front of the form, there is an area for the consent of the participants. After the students read the information about the research, they completed the other parts by ticking the voluntary participation option. In this way, the voluntary consent of the students was obtained. For students' questions and suggestions, the e-mail address of the principal researcher has been added under the explanation. The data is saved to the principal investigator's Google Drive account.

#### Strengths and Limitations

In the data collection process of the research, the opinions of the students studying at universities where the Turkish Nurses Association Student Commission does not have a representative could not be obtained. Therefore, the research results can be generalized to the study group.

## RESULTS

Table 1 shows the socio-demographic characteristics of nursing students. It was determined that 83.3% of the students were women, 32.5% were in the third grade, 98% did not have any disability, and 38.8% had a distant relative who had a disability. It was determined that 64.7% of the students did not participate in any activity for the benefit of persons with disabilities, 67.0% did not contribute to the realization of any activity for the benefit of persons with disabilities, 70.6% did not participate in any informative conversations about persons with disability and their health, and 60.8% did not read any scientific articles or

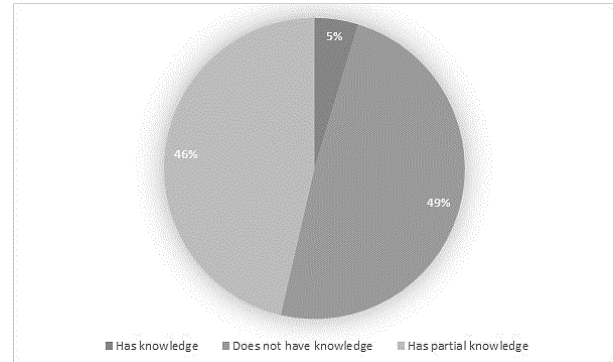
books about their health, and 61.8% of them did not provide care for persons with disability in their nursing practices.

**Table 1. Socio-demographic Characteristics of Students (n= 830)**

Socio-demographic Characteristics	n	%
<b>Gender</b>		
Female	691	83.3
Male	139	16.7
<b>Grade</b>		
1st	150	18.1
2nd	201	24.2
3rd	270	32.5
4th	209	25.2
<b>Condition of having disability<sup>a</sup></b>		
No disability	817	98.4
Has orthopedically disability	4	0.5
Has visual disability	4	0.5
Has hearing disability	2	0.2
Has a chronic illness	2	0.2
Has a bipolar disorder	1	0.1
<b>Condition of having a relative with a disability</b>		
Has a distant relative	323	38.8
Has no relative	318	38.3
Has somebody in his/her family	140	16.9
Has somebody among his/her friends	49	5.9
<b>Condition of taking part as a participant in an event organized for the benefit of persons with disability</b>		
Participated	293	35.3
Not participated	537	64.7
<b>Condition of contributing to the realization of an event for the benefit of persons with a disability</b>		
Contributed	274	33.0
Not contributed	556	67.0
<b>Condition of participating in an informative conversation related to persons with disability and their health</b>		
Participated	244	29.4
Not participated	586	70.6
<b>Condition of reading any scientific article or book related to persons with disability and their health</b>		
Read	325	39.2
Not read	505	60.8
<b>Condition of having cared for a patient with a disability in nursing practice</b>		
Provided care	317	38.2
Not provided any care	513	61.8

<sup>a</sup> It reflects the own responses of the students to an open-ended question.

It was determined that 49% of the nursing students did not have sufficient knowledge about nursing care for the health of persons with disabilities (Figure 1). Among the students, the rate of those who do not know the sign language used by hearing-impaired individuals is 76.9%, the rate of those who do not know the braille alphabet used by visually impaired individuals is 97.1%, and the rate of those who do not know the audio description method used in speech by visually impaired individuals is 91.7%. In addition, 57.3% of the students stated that they had partial knowledge about the basic concepts of persons with disability and their health, 50% of them about the inequalities faced by persons with disabilities in the field of health, and 48.1% of them about improving the health of people with disabilities (Table 2).



**Figure 1. Condition of Nursing Students Having Sufficient Knowledge about Nursing Care for the Health of Persons with Disability**

**Table 2. Nursing Students' Knowledge About Some Issues Related to the Health of Persons with Disability (n= 830)**

Baseline characteristic	Knows n (%)	Partially knows n (%)	Does not know n (%)
Sign language	44 (5.3)	148 (17.8)	638 (76.9)
Braille alphabet	9(1.1)	15 (1.8)	806 (97.1)
Audio description method	26 (3.1)	43 (5.2)	761 (91.7)
Basic concepts for persons with disability and their health	78 (9.4)	476 (57.3)	276 (33.3)
Inequalities faced by persons with disabilities in the field of health	108 (13)	415(50)	307 (37)
Improving the health of persons with disabilities	40 (4.8)	399 (48.1)	391 (47.1)

The rate of students who do not think that the content about persons with disabilities in nursing education is sufficient is 88.6%. The rate of students who believe that nursing education raises awareness about persons with disabilities is 46.6%. 43.4% of the students think that nursing education contributes to their level of knowledge about persons with disabilities. The rate of those who think that nursing education partially has a disability-friendly content is 46.5%. 68.6% of the students stated that the school where they receive their nursing education hasn't carried out any activities related to awareness of persons with disabilities. The rate of students who stated that the building of the school where nursing education is taken is suitable for the access of persons with disabilities is 35.5%. The rate of students who think that the school where nursing education is taken is sensitive to the rights of individuals with disabilities is 44.9% (Table 3).

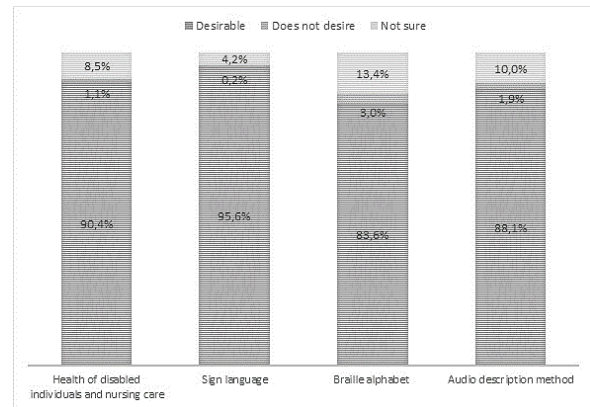
**Table 3. Distribution of Nursing Students' Thoughts on the Education They Receive Being Disabled-Friendly (n= 830)**

Baseline characteristic	n	%
Condition of thinking that sufficient place is reserved for persons with disabilities in nursing education		
Thinks sufficient place is reserved	95	11.4
Does not think sufficient place is reserved	737	88.6
Condition of thinking that nursing education raises awareness for persons with disability		
Agrees	387	46.6
Partially agrees	251	30.2
Disagrees	192	23.1
Condition of thinking that nursing education contributes to your level of knowledge about persons with disability		
Agrees	360	43.4
Partially agrees	293	35.3
Disagrees	177	21.3
Condition of thinking that nursing education has a disabled-friendly content		
Agrees	239	28.8
Partially agrees	386	46.5
Disagrees	205	24.7
Condition of performing any activities related to awareness of persons with disabilities in the school where nursing education is taken.		
Performed	261	31.4
Not performed	569	68.6
The condition whether the building of the school where nursing education is taken is suitable for the access of persons with disability		
Suitable	295	35.5
Partially suitable	281	33.9
Not suitable	254	30.6
Sensitivity of the school where nursing education is taken towards the rights of persons with disability		
Sensitive	373	44.9
Partially Sensitive	369	44.5
Not sensitive	88	10.6

The rate of the students who state that they partially know the inequalities faced by persons with disabilities in the health field find their nursing education partially disabled-friendly is 54.0%. It has been found that according to the level of knowledge of the inequalities faced by persons with disabilities in the field of health, the nursing education of the students has an impact on their thinking that they are disabled-friendly ( $p < .001$ ) (Table 4). It has been determined that students who think that their education is disabled-friendly are more aware of the inequalities faced by persons with disabilities in the field of health. The rate of the students who stated that they had partially sufficient knowledge about nursing care for the health of persons with disabilities reported that their nursing education was partially disabled-friendly is 52.5%. It has been found that the state of having sufficient knowledge about nursing care for the health of persons with disabilities has an impact on the students' thinking that their nursing education is disabled-friendly ( $p < .001$ ) (Table 4). Being disabled-friendly in nursing education increases students' knowledge of nursing care for the health of persons with disabilities. The rate of the students who stated that the building of the school where they received their nursing education was

partially suitable for accessing persons with a disability said that their nursing education was partially disabled-friendly is 52%. It has been found that the building of the school where the nursing education is taken is suitable for the access of persons with disabilities, affecting the students' thinking that their nursing education is disabled-friendly ( $p < .001$ ) (Table 4).

The rate of the students who stated that the school where nursing education is taken is not sensitive to the rights of persons with disabilities think that their nursing education is not disabled-friendly is 68.2%. It has been found that the school where the nursing education is taken being sensitive to the rights of persons with disabilities affected the students' thinking that their nursing education is disabled-friendly ( $p < .001$ ). The disability-friendly nature of nursing education increases students' sensitivity to the rights of individuals with disabilities. In addition, 68.2% of the students who stated that the school where they received their nursing education was not sensitive to the rights of persons with disabilities said that their nursing education was not disabled-friendly (Table 4).



**Figure 2 Distribution of the Answers Given by the Nursing Students Regarding Their Desire to Receive Education on Some Topics Related to Disability**

It was found that 95.6% of the students wanted to receive education on sign language, 90.4% on the health and nursing care of persons with disabilities, 88.1% on the audio description method, and 83.6% on the braille alphabet (Figure 2). Students mainly expressed opinions on running a separate course on individuals with disabilities (20.5%), giving sign language training (14.3%), mentioning disability in all lessons (9.2%), organizing disability awareness activities at school (8.3%), and giving more place to disability in the curriculum (8.0%) (Table 5).

**Table 4. Comparison of Some Characteristics of the Students with Their Condition of Thinking That Their Nursing Education Is Disabled-Friendly (n = 830)**

Baseline characteristic	Condition of thinking that nursing education has a disabled-friendly content			Statistics		
	Yes n (%)	Partially n (%)	No n (%)	df	χ <sup>2</sup>	p
<b>Condition of knowing the basic concepts for persons with disability and their health</b>						
Knows	32 (41) <sup>a</sup>	33 (42.3) <sup>a, b</sup>	13 (16.7) <sup>b</sup>	4	57.814	<.001
Partially knows	144 (30.3) <sup>a</sup>	251 (52.7) <sup>a</sup>	81 (17.0) <sup>b</sup>			
Does not know	63 (22.8) <sup>a</sup>	102 (37.0) <sup>a</sup>	111 (40.2) <sup>b</sup>			
<b>Condition of knowing the inequalities faced by persons with disabilities in the field of health</b>						
Knows	43 (39.8) <sup>a</sup>	41 (38.0) <sup>b</sup>	24 (22.2) <sup>a, b</sup>	4	28.850	<.001
Partially knows	111 (26.7) <sup>a</sup>	224 (54.0) <sup>b</sup>	80 (19.3) <sup>a</sup>			
Does not know	85 (27.7) <sup>a</sup>	121 (39.4) <sup>a</sup>	101 (32.9) <sup>b</sup>			
<b>Condition of having sufficient knowledge about nursing care for the health of persons with disability</b>						
Has knowledge	19 (48.7) <sup>a</sup>	12 (30.8) <sup>b</sup>	8 (20.5) <sup>a, b</sup>	4	57.387	<.001
Has partial knowledge	128 (33.2) <sup>a</sup>	202 (52.5) <sup>a</sup>	55 (14.3) <sup>b</sup>			
Has no knowledge	92 (22.7) <sup>a</sup>	172 (42.3) <sup>a</sup>	142 (35.0) <sup>b</sup>			
<b>The condition whether the building of the school where nursing education is taken is suitable for the access of persons with disability</b>						
Suitable	107 (36.3) <sup>a</sup>	144 (48.8) <sup>a</sup>	44 (14.9) <sup>b</sup>	4	38.730	<.001
Partially suitable	63 (22.4) <sup>a</sup>	146 (52.0) <sup>b</sup>	72 (25.6) <sup>a, b</sup>			
Not suitable	69 (27.2) <sup>a</sup>	96 (37.8) <sup>a</sup>	89 (35.0) <sup>b</sup>			
<b>Sensitivity of the school where nursing education is taken towards the rights of persons with disability</b>						
Sensitive	163 (43.7) <sup>a</sup>	163 (43.7) <sup>c</sup>	47 (12.6) <sup>b</sup>	4	160.312	<.001
Partially sensitive	70 (19.0) <sup>a</sup>	201 (54.4) <sup>b</sup>	98 (26.6) <sup>b</sup>			
Not sensitive	6 (6.8) <sup>a</sup>	22 (25.0) <sup>a</sup>	60 (68.2) <sup>b</sup>			

Each subscript letter denotes a subset of the "Condition of thinking that nursing education has a disability-friendly content" categories whose column proportions do not differ significantly from each other at the .05 level  
df: degrees of freedom, χ<sup>2</sup>: Chi-Square Test, p: p-value

**Table 5. Distribution of Students' Views on How Disability-Friendly Nursing Education Curriculum Should Be (n= 336)**

Suggestions <sup>a</sup>		n	%
Curriculum	Starting a separate course for persons with disability	69	20.5
	Mentioning disability in all classes	31	9.2
	Including disability more in the curriculum	27	8.0
	Mentioning the humanistic approach in the curriculum	2	0.6
	More mention of the nurse's advocacy role in lectures	1	0.3
Practice	Organizing disability awareness activities at school	28	8.3
	Organizing informative events about disability	26	7.7
	Adding disability-related empathy practices to course content	20	6.0
	Spending more time with persons with disabilities in practice	16	4.8
	Accessibility of nursing practices	14	4.2
	More internships in special education schools and rehabilitation centers	11	3.3
New methods	Sign language teaching	48	14.3
	Giving elective courses on persons with disability	18	5.4
	Braille alphabet training	14	4.2
	Inviting persons with disabilities to classes	6	1.8
	Providing audio description training	5	1.5

<sup>a</sup>It reflects the own responses of the students to an open-ended question

## DISCUSSION

The nursing profession has traditionally approached disability within the medical model framework and does not consider people with disabilities as a diverse society<sup>37</sup>. In order for nurses to better understand the needs of people with disabilities and to provide them with quality and appropriate nursing care, disability-related content needs to be integrated into the nursing curriculum<sup>18</sup>. However, although the nursing profession encompasses all humanity in its essence, most nursing programs include discrimination against people with disabilities<sup>10</sup>. It is seen that the content related to disability is mainly lacking in nursing education textbooks<sup>38</sup>. These factors affect the knowledge and attitudes of nursing students toward people with disabilities<sup>11</sup>.

This study determined that a significant part of the students did not participate in an activity for the benefit of persons with disabilities and did not contribute to realizing an activity. It is also seen that a significant proportion of students do not participate in any informative conversations about persons with disability and their health, and they do not read any scientific articles or books. In this study, it was found that the majority of the students did not care for persons with disabilities in their nursing practices. Çömez and Altan Sarıkaya (2017) showed in their research that 16.2% of the students cared for persons with disabilities<sup>39</sup>. Aydoğan and Çetin (2018) found that 79.1% of nursing students did not care for a patient with a mental disability<sup>40</sup>. In a different study, it was determined that 22.4% of nursing students had given care to an individual with special needs before<sup>41</sup>. In their research, Tugut et al. (2016) showed that nearly half of the nursing students did not provide health services to persons with disabilities during their nursing education<sup>28</sup>. A

multicentre study conducted in Greece found that most nursing students rarely or never come into contact with people with disabilities<sup>25</sup>. The data obtained in this study and similar studies show that nursing students have minimal contact with persons with disabilities in their practices.

In the current research, it has been determined that the majority of the students do not have sufficient knowledge about the improvement of the health of persons with disabilities, nursing care for the health of persons with disabilities, the basic concepts of persons with disabilities, and their health, sign language, audio description, braille alphabet, and the inequalities that the persons with disability face in the field of health. In different studies conducted in Türkiye, it has been determined that a large proportion of nursing students have not received any training on persons with disabilities before<sup>22,39,40</sup>. Tugut et al. (2016) showed in their multicentre study in Türkiye that most nursing students did not receive sexual health education for persons with disabilities<sup>28</sup>. In their research, Uysal et al. (2014) found that nursing students' prior knowledge about disability has a constructive effect on their attitudes toward people with disabilities<sup>22</sup>. Nurses have a high potential to care for people with disabilities in their work areas due to their significant ratio in the healthcare workforce. It is vital to train nurses at a level that can provide quality care to individuals with disabilities and the whole society<sup>42</sup>. However, it is seen that, based on the data obtained from this research and similar studies, nursing students do not receive enough information about persons with disability in their education.

In this study, it was determined that students who think that their education is disabled-friendly have more information on disability-related issues. It was found that most of the nursing students thought that the content of the education they received was partially disabled-friendly. In addition, the majority of students think that there is not enough content for persons with disability in nursing education, and they state that their schools are partially sensitive to the rights of persons with disabilities. This study determined that a significant proportion of the students wanted to receive education about the health and nursing care of persons with disabilities. Çömez and Altan Sarıkaya (2017) found in their research that most students want to be involved in caring for persons with disabilities<sup>39</sup>. This study reveals a picture of students wanting to be educated on disability in curriculum, practice, and new methods. The students in the study stated that they wanted to receive training on subjects such as Turkish sign language, disability health and nursing care, audio description method, and the braille alphabet. Similarly, Temple and Mordoch (2012) found that nursing students would like more training in caring for people with disabilities<sup>43</sup>.

## CONCLUSION

As a result of this research, a significant proportion of nursing students in Türkiye stated that they had not cared for persons with disabilities in their practice and did not have sufficient knowledge about nursing care for the health of this group. In addition, it has been determined that most of the students lack knowledge about sign language, the braille alphabet,

audio description method, basic concepts of persons with disability and their health, inequalities faced by persons with disabilities in the field of health, and improving the health of persons with disability. The rate of students who do not think the content about persons with disabilities in nursing education is sufficient is high. It is seen that the majority of the students find the education they receive partially disabled-friendly. The disability-friendly status of nursing students' education affects their level of knowledge on disability-related issues. Most of the students expressed their desire for education on disability-related issues.

It may be recommended to revise the nursing education curriculum to ensure that nursing education is disability friendly. Including courses, training programs, and courses on the care of persons with disabilities in the nursing education curriculum can strengthen nursing undergraduate education in terms of being disability-friendly. It can be suggested that nursing students have more contact with persons with disabilities and provide care to them in their field of practice. In line with the students' suggestions in the research, contents such as Turkish sign language, disability health and nursing care, audio description method, and braille alphabet can be added to the nursing curriculum.

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Data collection: GS

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**Teşekkür:** Veri toplama sürecinde yardımları için Türk Hemşireler Derneği Öğrenci Komisyonu yönetim kurulu

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