

12-30-2023

Attitudes toward Persons with Disabilities and Disability Awareness of University Students Providing Healthcare

Canan Ertemođlu Öksüz

Department of Anatomy, Vocational School of Health Services, Karadeniz Technical University, Trabzon 61080, Turkey, cananertem61@hotmail.com

Özlem Kanber Uzun

Department of Anatomy, Vocational School of Health Services, Karadeniz Technical University, Trabzon 61080, Turkey, ozlemkanber@hotmail.com

Şahi Nur Kalkışım

Department of Anatomy, Vocational School of Health Services, Karadeniz Technical University, Trabzon 61080, Turkey, sah.nur@hotmail.com

Nihat Burak Zihni

Department of Anatomy, Vocational School of Health Services, Karadeniz Technical University, Trabzon 61080, Turkey, nihaturakzihni@gmail.com

Follow this and additional works at: <https://scholarhub.ui.ac.id/mjhr>



Part of the [Health Services Research Commons](#), and the [Other Medical Sciences Commons](#)

Recommended Citation

Öksüz CE, Uzun ÖK, Kalkışım ŞN, Zihni NB. Attitudes toward Persons with Disabilities and Disability Awareness of University Students Providing Healthcare. Makara J Health Res. 2023;27.

Attitudes toward Persons with Disabilities and Disability Awareness of University Students Providing Healthcare

Canan Ertemoğlu Öksüz*^{ID}, Özlem Kanber Uzun^{ID}, Şahi Nur Kalkışım^{ID}, Nihat Burak Zihni^{ID}

Department of Anatomy, Vocational School of Health Services, Karadeniz Technical University, Trabzon 61080, Turkey

Abstract

Background: This study aims to determine the attitudes and disability awareness of university students who provide health services to persons with disabilities.

Methods: This study included 291 volunteer students studying at the Vocational School of Health Services, Karadeniz Technical University (KTU), and conducting clinical practice at KTU Farabi Hospital. A sociodemographic form was used to determine the individual characteristics of the students included in this study, and the Attitudes toward Disabled Persons Scale (ATDP) was applied to determine their attitudes toward persons with disabilities.

Results: The students' average ATDP score was 61.75 ± 12.34 . Statistically significant differences were found among situations wherein the students had chronic diseases, participated in disability-related education, and their ATDP scores ($p < 0.05$).

Conclusions: This study shows that our students have few prejudices against persons with disabilities and can empathize with them at a sufficient level. In addition, our students have an awareness of people with disabilities, and this awareness can be increased. Disability-related regulations should be introduced into educational curricula, and additional awareness-raising activities should be provided to improve the attitudes of healthcare students toward persons with disabilities.

Keywords: attitude, awareness, disabled persons, students

INTRODUCTION

People may have to live with incurable, unresolved, or physiological deficiencies. This situation is defined as disability.¹ Disability is defined as an unfavorable situation that prevents or limits the performance of the activities that an individual is expected to perform in accordance with age, gender, and social and cultural status as a result of any hereditary or acquired deficiency in orthopedic or mental abilities.^{2,3} Disability can affect the person with disabilities and the person responsible for their care physically, emotionally, and socially, exposing them to various problems.^{2,3}

Approximately 15% of the world population (WHO, 2011) and 6.6% of the Turkish population have at least one disability (including the population who stated that they have difficulty or none at all in at least one function related to disability). This figure, when considered together with the family members with whom they are in contact, reveals that disability affects approximately 10 million people. In some countries and regions, people with disabilities have minimized their differences from those without disabilities in terms of lifestyle and standards,

whereas in some countries, they are excluded from society. The root of this problem lies in negative attitudes toward persons with disabilities.^{2,3} Attitude is defined as a set of preformed feelings, thoughts, and beliefs that are continuous toward individuals, clusters, objects, or thoughts.^{4,5} It is not a behavior that can be directly observed but is instead a preparatory tendency for behaviors that are invisible to the eye; the presence of attitude is a result of seeing behaviors. Similar to numerous other behaviors, attitude is acquired in various ways and develops over the course of life.¹⁻³ Parents, friends, mass media, and past experiences are important factors that participate in the formation of attitude. Persons with disabilities often struggle with negative attitudes that prevent them from integrating into society. Physical disability in individuals is not the sole cause of a disability; it causes disability only if the person with disabilities feels inadequate or when others perceive them as inadequate.^{2,3} Although the general social attitude toward persons with disabilities is generally positive in most social contexts, able-bodied individuals may have underlying biases that contradict these behaviors.² Negative attitudes pose an invisible obstacle to the integration of persons with disabilities into society. For individuals with disabilities to take part in society fully and effectively, it is important to change the attitudes towards them positively.^{2,3}

Therefore, identifying individuals with and without prejudiced attitudes that make life difficult for persons

*Corresponding author:

Canan Ertemoğlu Öksüz
Department of Anatomy, Vocational School of Health Services,
Karadeniz Technical University, Trabzon, Turkey
E-mail: cananertem61@hotmail.com

with disabilities and revealing the factors that affect prejudiced attitudes are of great importance.² Health care professionals are individuals who frequently encounter persons with disabilities as well as provide services and care to them³. From this viewpoint, investigating how students who provide health services evaluate disability is necessary. Therefore, this study was conducted to determine the attitudes of university students providing health services toward persons with disabilities and evaluate their disability awareness.

METHODS

This study was conducted in accordance with the 2008 Declaration of Helsinki—Ethical Principles. Before this study was started, written consent was obtained from the institution wherein it will be conducted. The students participating in this study were informed about the research and provided verbal and written consent. Approval for the study protocol was obtained from the KTU Health Sciences Scientific Research Ethics Committee (E-13562490-799-305911).

This research was conducted at the Vocational School of Health Services, Karadeniz Technical University (KTU) during the academic year 2022–2023. The Vocational School of Health Services has four departments: Medical Documentation and Secretarial, Medical Imaging, Medical Laboratory, and Emergency First Aid. The data for this research were collected through a survey form created by using a random stratified sampling method. The inclusion criteria for the study group were as follows: conducted clinical practice at Farabi Hospital of KTU, in direct contact with patients, and voluntarily agreed to participate in the research. This research is based on volunteerism. Students who did not volunteer to participate were excluded from the study. A total of 320 students who conducted clinical practice at the hospital were assessed for eligibility. This study was conducted with 291 students because 26 students declined to participate, and three students were excluded for other reasons. The consent of the 291 students was obtained for participation.

In addition, for the determination of the sample size of the study, statistical power analysis was performed by using G*Power software to reach a power (β) value of 0.80 with an effect size of 0.50 and a sample rate of 1/3 between groups; the required total sample size was calculated as 174 students.⁶ This research was conducted with 291 students, including 72 males and 219 females, with a sample rate of approximately 0.33 between groups to reach a similar power value.

The questionnaire technique was used as the data collection method. The questionnaire form used in this work consisted of two parts. In the first part, a sociodemographic form consisting of questions to determine the individual characteristics of the volunteer

students participating in the research (age, gender, department, class, presence of persons with disabilities in the family, smoking, and working with persons with disabilities) was used. In the second part, the Attitudes toward Disabled Persons Scale (ATDP) developed by Yüker and Block as well as adapted into Turkish by Özyürek was applied to determine attitudes toward persons with disabilities.⁷ The purpose of this scale is to measure attitudes toward persons affected by disabilities in general without specifically distinguishing disability groups. This scale has a reliability coefficient of 0.67–0.83 and a test–retest reliability coefficient of 0.76 when used in a Turkish setting.^{1,2}

The scale consists of 20 items and is prepared with a six-point Likert format (+3, "I agree very much;" +2, "I agree pretty much;" +1, "I agree a little;" -1, "I disagree a little;" -2, "I disagree pretty much;" and -3, "I disagree very much"). Items 2, 5, 6, 11, and 12 of the scale are scored in reverse. After all items are added by taking their marks into account, the total score is obtained by adding +60 to eliminate negative values. The highest score that can be obtained on this scale is 120.⁷ High scores on the scale indicate that persons with disabilities are perceived similarly to nondisabled persons. Low scores indicate that persons with disabilities are perceived differently from nondisabled persons. They signify that persons with disabilities are not only perceived differently but are also seen as worthless. Therefore, they also reflect a prejudiced attitude toward persons with disabilities.¹ The participants were questioned about their knowledge of the regulations and practices for persons with disabilities in the hospital wherein they practice and whether these accommodations are sufficient. Their opinions were asked to measure their disability awareness.

Data were collected through face-to-face interviews conducted by the researchers in an educational seminar collectively attended by students. They were assured that the data collected in the survey would be kept completely confidential, there was no rush during the data collection phase, and efforts were made to minimize prejudices by making the participants feel that the survey was valuable. Before data collection, the students who wanted to participate in the study were voluntarily informed about the purpose of the research, and written informed consent was obtained from all students. Most students took approximately 15 min to complete the questionnaire.

The data obtained from the research were analyzed in a computer environment by using the KTU-licensed SPSS 22.0 statistics program. In this study, the number, percentage, and mean \pm standard deviation (SD) values of the descriptive data are given. The Shapiro–Wilk test was conducted to determine if the scale scores were normally distributed, and the reliability level was determined with Cronbach's alpha coefficient. The chi-square test was used

for the comparison of categorical variables, and the significance of differences between two means in comparative analysis and one-way analysis of variance was tested accordingly. Here, $p < 0.05$ was considered statistically significant.

RESULTS

A total of 291 students (219 females and 72 males) aged 17–26 years old were enrolled, and the response prevalence of the participants was 100%. The mean age of students was 19.44 ± 1.86 . The students' mean ATDP score was 61.75 ± 12.34 (range 22–90).

The Cronbach's alpha coefficient of the scale was 0.573. Cronbach's alpha coefficient varies between 0 and 1. A coefficient of 0.00–0.40 indicates unreliability, that of 0.41–0.59 represents low reliability, that of 0.61–0.80 reflects moderate reliability, and that of 0.81–1.00 indicates high reliability.⁸ Accordingly, the scale has low reliability. In this study, the power value was calculated as approximately 0.93 in accordance with the calculated Cronbach's alpha value and was sufficient. Shapiro–Wilk normality analysis performed for the ATDP score was also found to be suitable for a normal distribution.

The basic demographic characteristics of the students and the comparison of their ATDP scores in accordance with these characteristics are presented in Table 1. Some features related to the disabilities of the students and a comparison of ATDP scores in accordance with these features are presented in Table 2.

A total of 17 (5.8%) of the 25 (8.6%) students with chronic diseases stated that they continuously used drugs because of their condition. The comparison of ATDP scores in accordance with the basic demographic characteristics of the students revealed no significant difference between attitudes toward persons with disabilities in accordance with sex, age, department, grade, and smoking and that the groups generally had similar attitudes. However, a statistically significant difference was found between the students' presence of chronic diseases and ATDP scores, and those without chronic diseases had more positive attitudes toward persons with disabilities than other students ($p < 0.05$) ($p = 0.002$, Table 1). Of the 176 (60.5%) students who responded that they provide health services to persons with disabilities, 11 (6.2%) stated that they encountered difficulties while providing services, 39 (22.2%) stated that they did not encounter any difficulties while providing services, and 126 (71.6%) stated that they sometimes had difficulties while providing services. In addition, 161 (55.3%) students stated that they had encountered hearing-impaired persons at least once during their clinical practice and provided services to these individuals. A total of 138 (85.7%) students who encountered hearing-impaired individuals stated that they attempted to help

the individuals by trying to understand them, 14 (8.7%) were upset that they could not communicate with the hearing-impaired individual, and nine (5.6%) communicated eye to eye.

In our study, 23 (7.9%) of the students stated that they observed that the regulations for persons with disabilities were sufficient, 132 (45.4%) stated that the regulations were insufficient, and 136 (46.7%) did not have an opinion on this issue during their clinical practice. When the students who thought that the regulations for persons with disabilities were not sufficient were asked what the priority problem was for disabled individuals, 36 (27.3%) stated that "lack of personnel who could understand and guide person with disabilities and answer their question;" 30 (22.7%) stated "not showing sufficient respect, importance, interest, and sensitivity to disabled person;" 51 (38.6%) stated "lack of communication with the disabled person;" and 15 (11.4) expressed "lack of necessary physical arrangements to facilitate the lives of persons with disabilities."

The comparison of ATDP scores on the basis of some features related to the disability of students found no significant difference between ATDP scores in accordance with the presence of persons with disabilities in the family, working experience with persons with disabilities during clinical practice, providing health services to persons with disabilities, willingness to share a home with persons with disabilities, willingness to work with persons with disabilities, training on approaches toward persons with disabilities throughout their education, and knowing sign language. However, a statistically significant difference was identified between the disability-related education participation status and ATDP scores of the students, and the students without disability-related education had more positive attitudes toward persons with disabilities than other students ($p < 0.05$) ($p = 0.039$, Table 2).

The knowledge status of the students about the accommodations made for persons with disabilities in the hospital wherein they conduct clinical practice is shown in Table 3. The students had low rates of knowing about the following regulations made for persons with disabilities in the hospital wherein they conduct clinical practice: car parking places, disabled lifts, wheelchair ramps, grab bars, welcoming staff, and sign language staff. However, 50.5% of the students know that there are toilets for the use of disabled individuals and 41.6% of them know that it is a guidance sign for sight-disabled persons (Table 3). In addition, when the students were asked about their opinions on prioritizing persons with disabilities in the hospital wherein they conduct clinical practice, 39.5% stated that persons with disabilities were given adequate priority for diagnosis and treatment procedures, 22.3% stated that no priority was given, and 38.1% stated that they had no idea.

TABLE 1. Basic demographic characteristics of students and comparison of their ATDP scores in accordance with characteristics

Basic demographic characteristics	N	%	Mean ± SD	<i>p</i>
Gender				0.394
Female	219	75.3	61.40 ± 12.41	
Male	72	24.7	62.83 ± 12.13	
Age				0.188
17-21	258	88.7	61.41 ± 12.46	
22-26	33	11.3	64.42 ± 11.13	
Department				0.503
Medical documentation and secretarial	95	32.6	62.61 ± 14.40	
Emergency first aid	73	18.2	60.26 ± 11.46	
Medical laboratory	70	24.1	61.28 ± 11.82	
Medical imaging	53	25.1	62.90 ± 10.03	
Grade				0.843
First	163	56	61.88 ± 12.54	
Second	128	44	61.59 ± 12.12	
Smoking				0.157
Never smoker	232	79.7	61.09 ± 12.27	
Current smoker	42	14.4	65.02 ± 12.27	
Ex-smoker	17	5.8	62.70 ± 12.88	
Chronic disease				0.002*
Yes	25	8.6	54.36 ± 12.84	
No	266	91.4	62.45 ± 12.08	

*Independent samples t-test

TABLE 2. Features related to the disability of students and comparison of ATDP scores in accordance with these features

Features related to disability	N	%	Mean ± SD	<i>p</i>
Presence of a person with disabilities in the family				0.264
Yes	9	3.1	54.66 ± 18.16	
No	282	96.9	61.98 ± 12.09	
Working experience with a person with disabilities during clinical practice				0.694
Yes	43	14.8	61.06 ± 10.71	
No	248	85.2	61.87 ± 12.61	
Providing health services to persons with persons with disabilities				0.099
Yes	176	60.5	62.72 ± 11.62	
No	115	39.5	60.27 ± 13.28	
Willingness to share a home with persons with disabilities				0.091
Yes	179	61.5	60.78 ± 12.73	
No	112	38.5	63.30 ± 11.57	
Willingness to work with persons with disabilities				0.074
Yes	226	77.7	61.06 ± 12.30	
No	65	22.3	64.16 ± 12.25	
Participation in disability-related education				0.039*
Yes	23	7.9	56.65 ± 13.29	
No	268	92.1	62.19 ± 12.18	
Training on approaches toward persons with disabilities throughout their education				0.459
Yes	46	15.8	63.23 ± 15.17	
No	245	84.2	61.47 ± 11.75	
Knowing sign language				0.092
Yes	10	3.4	55.30 ± 8.92	
No	281	96.6	61.98 ± 12.39	

*Independent samples t-test

TABLE 3. Knowledge rates of students regarding the regulations for persons with disabilities in the hospital wherein they conduct clinical practice

Regulations for Persons with Disabilities	Yes N (%)	No N (%)	No idea N (%)
Disabled parking places	66 (22.7)	94 (32.3)	131 (45.0)
Disabled lifts	77 (26.5)	119 (40.9)	95 (32.6)
Wheelchair ramps	95 (32.6)	115 (39.5)	81 (27.8)
Grab bars	89 (30.6)	113 (38.8)	89 (30.6)
Welcoming and directing staff	54 (18.6)	135 (46.4)	102 (35.1)
Disabled toilets	147 (50.5)	72 (24.7)	72 (24.7)
Guidance signs for persons with visual disabilities	121 (41.6)	114 (39.2)	56 (19.2)
Sign language staff	12 (4.1)	154 (52.9)	125 (43.0)

TABLE 4. Comparison of students' willingness to share a home with persons with disabilities in accordance with demographic and disability-related features

Variable	Willingness to share a home with persons with disabilities		
	Yes N (%)	No N (%)	<i>p</i>
Gender			
Female	136 (62.1)	83 (37.9)	0.719
Male	43 (59.7)	29 (40.3)	
Age			
17-21	157 (60.9)	101 (39.1)	0.518
22-26	22 (66.7)	11 (33.3)	
Department			
Medical documentation and secretarial	67 (70.5)	28 (29.5)	0.014*
Emergency first aid	45 (61.6)	28 (38.4)	
Medical laboratory	44 (62.9)	26 (37.1)	
Medical imaging	23 (43.4)	30 (56.6)	
Grade			
First	97 (59.5)	66 (40.5)	0.428
Second	82 (64.1)	46 (35.9)	
Smoking			
Never smoker	143 (61.6)	89 (38.4)	0.930
Current smoker	25 (59.5)	17 (40.5)	
Ex-smoker	11 (64.7)	6 (35.3)	
Chronic disease			
Yes	18 (72.0)	7 (28.0)	0.260
No	161 (60.5)	105 (39.5)	
Presence of persons with disabilities in the family			
Yes	8 (88.9)	1 (11.1)	0.086
No	171 (60.6)	111 (39.4)	
Working experience with persons with disabilities during clinical practice			
Yes	32 (74.4)	11 (25.6)	0.060
No	147 (59.3)	101 (40.7)	
Total	179 (61.5)	112 (38.5)	

**p* < 0.05

The knowledge status of the students about the accommodations made for persons with disabilities in the hospital wherein they conduct clinical practice is shown in Table 3. The students had low rates of knowing about the following regulations made for persons with disabilities in the hospital wherein they conduct clinical practice: car parking places, disabled lifts, wheelchair ramps, grab bars, welcoming staff, and sign language staff. However, 50.5% of the students know that there are toilets for the use of

disabled individuals and 41.6% of them know that it is a guidance sign for sight-disabled persons (Table 3). In addition, when the students were asked about their opinions on prioritizing persons with disabilities in the hospital wherein they conduct clinical practice, 39.5% stated that persons with disabilities were given adequate priority for diagnosis and treatment procedures, 22.3% stated that no priority was given, and 38.1% stated that they had no idea.

The comparison of the students' willingness to share a home with a person with disabilities in accordance with several features is presented in Table 4, and the comparison of their opinions on prioritizing persons with disabilities in the hospital wherein they perform clinical practice in accordance with features is provided in Table 6. The comparison of the students' willingness to share a home with persons with disabilities in accordance with some features revealed no significant differences among gender, age, grade, smoking, chronic disease, presence of persons with disabilities in the family, working experience with persons with disabilities during clinical practice, and their thoughts of willingness to share a home with persons with disabilities. However, a statistically significant difference was found between the students' thoughts of willingness to share a home with persons with disabilities in accordance with their departments ($p < 0.05$) ($p = 0.014$, Table 4). Gender, age, department, grade, smoking, chronic disease, presence of persons with disabilities in the family, and working experience with persons with disabilities during clinical practice did not have a significant effect on thoughts about giving priority to persons with disabilities (Table 5).

DISCUSSION

Persons with disabilities are defined as those who have lost their physical, mental, spiritual, emotional, and social abilities to various degrees because of any congenital or acquired disease or accident and who do not comply with the requirements of normal life.³ Persons with disabilities encounter numerous problems in their social life. One of the most important of these problems is experienced in the field of healthcare. This study was conducted to determine the attitudes of university students providing healthcare services toward persons with disabilities.

In our research, the average ATDP score, which was used to determine students' attitudes toward persons with disabilities, was 61.75 ± 12.34 , and the Cronbach's alpha coefficient was 0.573. A study aiming to determine the attitudes of healthcare university students toward persons with disabilities by using ATDP reported a Cronbach's alpha coefficient for ATDP of 0.592 and stated that the scale had low reliability.² Our research is similar to Sahin and Bekir's study in terms of scale reliability.²

TABLE 5. Comparison of students' opinions on prioritizing persons with disabilities in the hospital wherein they conduct clinical practice in accordance with features

Variable	Giving priority to persons with disabilities			<i>p</i>
	Yes N (%)	No N (%)	No idea N (%)	
Gender				
Female	87 (39.7)	45 (20.5)	87 (39.7)	0.395
Male	28 (38.9)	20 (27.8)	24 (33.3)	
Age				
17–21	102 (39.5)	57 (22.1)	99 (38.4)	0.955
22–26	13 (39.4)	8 (24.2)	12 (36.4)	
Department				
Medical documentation and secretarial	42 (44.2)	18 (18.9)	35 (36.8)	0.668
Emergency first aid	25 (34.2)	21 (28.8)	27 (37.0)	
Medical laboratory	26 (37.1)	17 (24.3)	27 (38.6)	
Medical imaging	22 (41.5)	9 (17.0)	22 (41.5)	
Grade				
First	65 (39.9)	31 (19.0)	67 (41.1)	0.261
Second	50 (39.1)	34 (26.6)	44 (34.4)	
Smoking				
Never smoker	98 (42.2)	53 (22.8)	81 (34.9)	0.065
Current smoker	12 (28.6)	11 (26.2)	19 (45.2)	
Ex-smoker	5 (29.4)	1 (5.9)	11 (64.7)	
Chronic disease				
Yes	8 (32.0)	6 (24.0)	11 (44.0)	0.715
No	107 (40.2)	59 (22.2)	100 (37.6)	
Presence of persons with disabilities in the family				
Yes	5 (55.6)	2 (22.2)	2 (22.2)	0.543
No	110 (39.0)	63 (22.3)	109 (38.7)	
Working experience with persons with disabilities during clinical practice				
Yes	23 (53.5)	8 (18.6)	12 (27.9)	0.123
No	92 (37.1)	57 (23.0)	99 (39.9)	

However, on the contrary, there are studies that find the reliability coefficient of the scale higher and report that it is reliable.⁹

In our study, the average ATDP score shows that our students who provide health services have moderately positive attitudes and lack prejudiced attitudes toward persons with disabilities. The average ATDP scores of our study share similarities with those of several works investigating the attitudes of other healthcare students and employees toward persons with disabilities.^{1,9-11} However, other studies investigating the attitudes of healthcare students toward persons with disabilities found low average ATDP scores,^{2,12} whereas others found high average ATDP scores.^{13,14} The literature has emphasized that important experiences are needed to form positive attitudes.^{15,16} Another study that measured nursing students' attitudes toward persons with disabilities before and after using ATDP reported a considerable difference between the first and second scale scores; specifically, it found that students' attitudes changed positively.¹⁷ The positive attitudes of healthcare professionals, a group that encounters the disabled frequently, will enable persons with disabilities to receive good health services. Studies investigating the effect of the sociodemographic characteristics of students and employees in other healthcare fields on ATDP scores concluded that age and sex did not have a remarkable effect on attitude scores.^{1,9,12} These studies and our research demonstrate that sex and age do not affect attitudes toward persons with disabilities ($p < 0.05$) (Table 2). However, a statistically significant difference was observed between the disability-related education event participation status and ATDP scores of the students, and the students who did not participate in disability-related education events had positive attitudes toward persons with disabilities ($p < 0.05$, Table 3). Studies conducted in the healthcare field discovered no significant difference between the presence of a person with disabilities in the family and ATDP scores, as well as between participation in educational activities related to persons with disabilities or persons with disabilities and attitude scores.^{1,2,10,12,13}

In our study, 3.1% of the students stated that their family includes a member with disabilities. A study investigating the attitudes of healthcare professionals toward persons with disabilities reported a rate of 4.1%, which is in line with our research results.¹ A work investigating the attitudes of students in the healthcare field toward persons with disabilities reported a rate of 22.2%.¹³ The rate of students who stated that they desire to share a home with persons with disabilities was 61.5%, that of those who stated that they worked with a person with disabilities during their clinical practice at the hospital was 14.8%, and that of those who stated that they desire to work with persons with disabilities was 77.7%. In contrast to our work, a study investigating the attitude of healthcare professionals toward persons with disabilities

reported that the rate of those who desire to share the same house with persons with disabilities was 30.5%, that of those who stated that they have a person with disabilities in their working environment was 3.6%, and that of those who stated that they desire to work with a person with disabilities was 36.4%.¹ The results of our research indicate that our students have few prejudices against persons with disabilities and can show sufficient empathy.

In our study, 3.4% of the students stated that they knew sign language, and 55.3% had encountered a hearing-impaired person at least once during clinical practice at the hospital. A total of 85.7% of the students who encountered a hearing-impaired person stated that they tried to help the individual by trying to understand them, 8.7% were upset that they could not communicate, and 5.6% communicated eye to eye. A study that determined the attitude of healthcare professionals toward hearing-impaired individuals found that all of the participants in the study did not know sign language, 75.5% had encountered a hearing-impaired individual at least once during their profession, and 47.4% were upset because they could not communicate with hearing-impaired individuals.⁹ The similar results of our research and previous studies indicate that adding sign language education to educational curricula in the healthcare field may be beneficial.

Approximately 8.5 million patients with chronic diseases and persons with disability live in Turkey, and these individuals face many problems in their social life due to numerous obstacles and inappropriate regulations that restrict their mobility in their environment. One of the most important problems is that the environment, especially the health environment, is not equipped in accordance with their needs. Therefore, persons with disabilities cannot sufficiently benefit from health services. The level of the arrangements made for the disabled persons in the hospitals they apply to for the disabled individuals to benefit from the health services in the best way is of great importance.¹ The students in our research answered "no" or "no idea" to most of the questions about practices and physical accommodations for persons with disabilities in the hospital wherein they conducted clinical practice (Table 4). On the basis of these results, we conclude that our students have a low awareness of the regulations made for persons with disabilities in the hospital wherein they conduct clinical practice. In line with the results of our study regarding regulations for persons with disabilities, a previous work investigating the attitudes of healthcare professionals toward persons with disabilities found that employees have a low level of awareness.¹ A total of 39.5% of the students in our study stated that persons with disabilities were given sufficient priority in diagnosis and treatment procedures. In contrast to our work, a study investigating the attitudes of healthcare professionals toward persons

with disabilities found a considerable difference between the participants' opinions on giving priority to persons with disabilities in the hospital they work in and gender and age.¹ In our study, the comparison of students' willingness to share a home with a disabled person according to their characteristics indicates that although there is a statistically significant difference between the students' thoughts of willingness to share a home with a disabled person and the departments they study.

Other studies in the literature aiming to determine the attitude toward persons with disabilities used a different scale (Questionnaire of Attitudes toward Disability). They reported that university students in the healthcare field have positive attitudes toward persons with disabilities.^{3,18,19} A work investigating the importance of early contact with persons with disabilities for the attitude of two different groups of university students in the field of health concluded that the group with close contact with persons with disabilities gained additional preliminary information about attitude.²⁰ A study that evaluated the perspective and disability awareness of university students studying in health and non-health departments with their own questionnaire questions without using a scale concluded that the disability awareness of the departments was insufficient, and their answers were similar.²¹

This study has some limitations. Firstly, the findings obtained from this study cannot be generalized to all providing health services in a university hospital in only one province. The second limitation is university students and all hospitals in our country; since our sample group consisted of university students the majority of our sample was female. Another limitation is that the insufficient number of students with persons with disabilities in their families made statistical comparison and interpretation difficult. Future researchers may use larger sample sizes and different methodologies to investigate this issue further.

CONCLUSIONS

All employees serving in the healthcare field are expected to provide the highest and equal level of healthcare to individuals who constitute society without any discrimination. People with disabilities should be able to benefit from health services as easily as non-disabled individuals, and they should be ensured to benefit from health services without any problems from the moment they enter a health institution. Therefore, determining the attitudes and awareness of disabilities of a group of university students providing healthcare makes our study different from other similar studies. Disability-related regulations should be introduced to educational curricula, and additional awareness-raising activities should be included to ensure that healthcare students' attitudes toward persons with disabilities improve.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest to declare.

FUNDING

This study did not receive funding from any institution or agency.

Received: November 3, 2023 | Accepted: December 15, 2023

REFERENCES

1. Kılıç E, Çıtıl R. Attitudes of physicians and nurses towards the disabled and awareness of applications for the disabled in a university hospital. *Turk J Family Med Prim Care*. 2019;13:129-41.
2. Şahin H, Bekir H. Üniversite öğrencilerinin engellilere yönelik tutumlarının belirlenmesi [Determination of university student attitudes toward disabled people]. *Turk Sosyal Araştırmalar Dergisi*. 2016;20:767-79. Turkish.
3. Çalbayram NÇ, Aker MN, Akkuş B, Durmuş FK, Tutar S. Sağlık bilimleri fakültesi öğrencilerinin engellilere yönelik tutumları [Attitudes of health sciences faculty students towards disabled persons]. *Ankara Sağlık Bilimleri Dergisi*. 2018;7:30-40. Turkish.
4. Özyürek M. *Engellilere yönelik tutumların değiştirilmesi* [Changing attitudes towards disabled people]. Ankara: Kök Publishing; 2016. Turkish.
5. Gençtürk Z, Korkut G. Üniversite öğrencilerinin engelli bireylere yönelik tutumlarının incelenmesi [Examination of attitudes of university students towards person with disabilities]. *Bingöl Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*. 2020;19:105-26. Turkish.
6. Faul F, Erdfelder E, Lang AG, Buchner A. G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behav Res Methods*. 2007;39:175-91.
7. Yuker HE, Block JR, Youning JH. *The measurement of attitudes toward disabled persons*. New York: U.S. Department of Health, Education & Welfare; 1970.
8. Kılıç S. Cronbach'ın alfa güvenilirlik katsayısı [Cronbach's alpha reliability coefficient]. *J Mood Disord*. 2016;6:47-8. Turkish.
9. Çelik F, Terkeş N, Uslular E, Şahin Ö, Savaş L, Karateke A, et al. hemşirelerin işitme engelli bireylere yönelik tutumlarının belirlenmesi [Determination of nurses' attitudes towards deaf people]. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi*. 2017;20:244-53. Turkish.
10. Uysal A, Albayrak B, Koçulu B, Kan F, Aydın T. Attitudes of nursing students toward people with disabilities. *Nurse Educ Today*. 2014;34:878-84.
11. Şimşek Ç, Çavdar S, Temiz E, Gündüz B, Yalçınkaya EY. The attitude of healthcare professionals towards disabled individuals. *J Acad Res Nurs*. 2020;6:545-53.
12. Gürkan DY, Kara BB, Kitiş Y, Dülger H. Sağlık alanında önlisans düzeyinde eğitim gören ve engellilerle çalışan öğrencilerin engellilere yönelik tutumlarının

- belirlenmesi [Determination of the attitudes of students studying at associate level in the field of health and working with people with disabilities towards people with disabilities]. *J Acad Soc Sci Stud*. 2020;80:395-406. Turkish.
13. Sarı HY, Bektaş M, Altıparmak S. Hemşirelik öğrencilerinin engellilere yönelik tutumlarının belirlenmesi [Determining the attitudes of nursing students towards disabled people]. *Yeni Tıp Dergisi*. 2010;27:80-3. Turkish.
 14. Altıparmak S, Sarı HY. Manisa ilinde engelli bireylere karşı toplumsal tutum [Public attitudes toward people with disability in Manisa]. *Anadolu Psikiyatr De*. 2012;13:110-6. Turkish.
 15. Au KW, Man DW. Attitudes toward people with disabilities: A comparison between health care professionals and students. *Int J Rehabil Res*. 2006;29:155-60.
 16. Tervo RC, Palmer G, Redinius P. Health professional student attitudes towards people with disability. *Clin Rehabil*. 2004;18:908-15.
 17. Thompson TL, Emrich K, Moore G. The effect of curriculum on the attitudes of nursing students toward disability. *Rehabil Nurs*. 2003;28:27-30.
 18. Coban AI, Ozden SA, Tekindal MA, Polat G. Assessing health science students' attitudes towards persons with disabilities in Turkey. *Biomed Res*. 2017;28:5370-7.
 19. Gökçe A, Güneş G, Seyitoğlu DÇ. İnönü Üniversitesi tıp fakültesi öğrencilerinin engellilere yönelik tutum ve davranışları [The attitudes and behaviors of the medical faculty students of Inonu University towards the disabled]. *Med Sci*. 2016;5:351-62. Turkish.
 20. Sahin H, Akyol AD. Evaluation of nursing and medical students' attitudes towards people with disabilities. *J Clin Nurs*. 2010;19:2271-9.
 21. Arman N, Tarakçı E, Karaaslan TÇ, Zirek E. Sağlık alanında ve sağlık alanı dışındaki bölümlerde okuyan üniversite öğrencilerinin engelliliğe bakışının ve engellilik farkındalıklarının incelenmesi [Investigation of awareness and perspective about handicape university students studying in health and non-health departments]. *Turk Klin J Health Sci*. 2020;5:47-86. Turkish.