

Original Article

Nursing Students' Attitudes towards Disabled Individuals: A Descriptive Study

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Abstract

Background: The disability attitude of nurses, the largest population of health professionals, can affect health care. Nursing students' attitudes towards disabled individuals have a moderate-positive attitude, and first-year students have the most negative attitudes compared to upper-year students. Nursing students have various opportunities throughout the curriculum to encourage more positive attitudes.

Objective: To identify nursing students' attitudes toward disabled individuals and factors affecting their attitudes.

Methods: This research was conducted with a descriptive design. It was conducted on first, second, third, and fourth-year students (n=766) in the nursing department of a state university. A questionnaire and the Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS) were used for the data collection. Factors considered related were tested with Independent samples t-test and one-way ANOVA. Statistical significance was defined as a p-value<0.05.

Results: The feelings of the nursing students participating in the study towards the disabled individual were found to be more negative, unlike their thoughts and behaviour. There is a significant relationship between being a woman (p<0.001), being upper class (p<0.001), the presence of a disabled person in the immediate vicinity (p<0.001), receiving education about disability (p<0.001), having information about the legal regulations for the disabled people (p<0.001), and attitude towards a disabled person.

Conclusion: Nursing students' attitudes towards disabled individuals were found to be moderately positive. At all grade levels and in the context of the nursing profession, to increase the awareness and sensitivity of students, innovative projects and areas where disabled and non-disabled individuals can come together should be considered. It may be recommended that the factors affecting attitudes towards disabled people be investigated in depth using qualitative research methods.

Keywords: attitudes, nursing, nursing students, people with disabilities,

Introduction

According to the World Health Organization (WHO), more than one billion people globally (about 15% of the global population) have some form of disability. It is predicted that this rate will increase over time due to the ageing of the population and the impact of non-communicable diseases. However, it is estimated that every individual will experience a permanent or temporary disability at some point (WHO,2021).

Disability is recognised as a complex interaction between an individual's health status and environmental factors, resulting in impairments, activity limitations, and participation restrictions (WHO,2015). According to WHO, approximately 190 million people aged 15 and over struggle with basic activities and need health services (WHO, 2021). In Turkey, 2,511,950 disabled individuals are registered in the National Disability Data System, and 775,012 of them

are severely disabled (Minister of Family and Social Services, 2021)

Individuals may sometimes be discriminated against in society and exposed to negative attitudes due to their disabilities (Buz & Karabulut, 2015). Attitudes are defined as a form of expression consisting of individuals' cognitive (knowledge and beliefs), affective (emotional-motivational), and behavioural (motivational or action) components (Radlińska et al., 2021). Individuals' attitudes towards disabled people can direct their behaviour (Yorke et al., 2017). Negative attitudes towards disabled individuals affect the whole of people's lives, creating invisible obstacles and preventing individuals from benefiting from social resources and taking part in social life (UNICEF, 2015; Altunhan et al., 2021). Due to negative attitudes, disabled individuals experience problems in education, transportation, and employment, especially healthcare (Calbayram et al., 2018). These negativities are described as one of the main problems disabled individuals face in accessing essential health services (Geçkil et al., 2017). In particular, the negative attitudes of healthcare providers towards disabled individuals play a crucial role in inequalities in access and quality of healthcare services (Desroches, 2020). The attitudes of health professionals are essential in helping disabled individuals participate in society and meet their needs. In this context, students studying in the field of health should be trained to establish therapeutic relationships with disabled individuals and be sensitive to the needs of individuals (Radlińska et al., 2021).

It is known that in the past years, in developing countries, disability was defined as a burden, a source of shame, a pitiful situation, or punishment; therefore, disabled individuals lived isolated from society (Darawsheh, 2022). It is stated that disabled people in Turkey face many obstacles in participating in social life and are exposed to harmful discrimination due to prejudices. Although individuals in society have verbally positive attitudes towards disabled people, it is reported that this is the opposite in behaviour, and they cannot accept disabled individuals (Altıparmak & Sari, 2012). Although the integration of disabled individuals into society has been paved by

supporting the participation of disabled people in social activities through state policies, negative attitudes and prejudices on this issue continue (Apaydin & Baris, 2021). As the disability becomes more serious, society's negative attitude increases (Slater, 2020).

Nurses provide care to disabled individuals at various stages, from diagnosis of disability to rehabilitation. In this process, nurses can provide qualified health care to disabled individuals with communication, leadership, critical thinking, and decision-making skills. The nurse's knowledge and attitudes about disability are precious for the disabled individual and his family to cope with the current situation, manage the crisis process, develop independence, and prevent social stigma and prejudice (Celik et al., 2017; Keklicek & Unsar, 2021). To address social inequalities in health, it is of great importance and priority for nurses to develop non-prejudicial attitudes towards individuals with disabilities (Kritsotakis et al., 2017). In the literature, it has been reported that in studies evaluating the attitudes of nurses and student nurses toward disabled individuals in health care, attitudes are often found to be moderately positive (Oliva Ruiz et al., 2020; Ozdemir & Karadag, 2021; Subay et al., 2022). This situation causes nursing researchers to focus on studies to change nurses' potentially negative attitudes toward disabled individuals (Geçkil et al., 2017). The basic questions of this research are how nursing students' attitudes towards disabled individuals are based on a sample case and whether these attitudes vary according to some characteristics of the students.

Research question

1. What is the attitude of nursing students towards disabled individuals?
2. Is there a difference between the descriptive characteristics of nursing students and their attitudes toward disabled individuals?

Materials and methods

Research design

A descriptive design was used and reported according to the STROBE checklist.

Research aim

This research aims to determine the attitudes of nursing students studying at a state

university towards disabled individuals and the factors affecting their attitudes.

Participants

This study was conducted between January and March 2023 with students enrolled in the first, second, third, and fourth-year nursing programs at a state university in the Central Anatolia region of Turkey. Nursing students at this university have internship opportunities to provide health services to disabled individuals from different segments of society, such as hospitals, community health centres, and elderly centres.

The research population consists of 970 nursing students. Considering the rapid application of data and cost-effectiveness, the complete count sampling method was used (Given, 2008). Students who did not want to participate and were absent on the research day were excluded from the study. At the end of the research, 78.9% of the population (n=766) was reached. Understanding Turkish and not having a mental health problem constituted the study's inclusion criteria.

Research Variables

Dependent Variables: The score obtained from the Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS) constitutes the dependent variable of the research.

Independent Variables: Gender, age, behaviour, economic level, place of residence, parents' education level, presence of disabled individuals in the family and environment, and knowledge about disability and the rights of disabled people constitute the independent variables of the research.

Data collection: A descriptive characteristics form was prepared for data collection in line with the literature, and MAS was used to collect students' personal information.

Descriptive Characteristics Form: The form consists of 12 questions that determine the gender, age, grade level, economic status, place of residence, educational status of parents, type of contact with people with disabilities, the state of wanting to share a home with a disabled person, the state of receiving disability-related education, and the state of having information about legal regulations related to disabled people (Geckil et al., 2017; Ozdemir & Karadag, 2021; Subay et al., 2022).

The Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS):

The scale was adapted from Findler et al. (2007), and Turkish validity and reliability were determined by Yelpaze and Turkum (2018). A 5-point Likert scale (1: Not at all, 5: Very much) was used for rating the scale. The scale has three subdimensions; it consists of 34 items: 14 items for "Emotion", nine items for "Thought", and eight items for "Behavior". After all coding, including reverse coding, the score of each dimension and the total scale are calculated. A high score indicates a positive attitude. The scale's Cronbach Alpha internal consistency coefficient is .90. The Cronbach Alpha internal consistency coefficient of the scale in this study was determined as .90. In the scale, a scenario is given to the participants through Deniz. The scenario is as follows: *"Deniz went to a cafe for lunch with his friends. A person in a wheelchair, whom Deniz did not know, entered the cafe and joined the group. Deniz met this person, and immediately after, all her friends except Deniz left the cafe, and Deniz was left alone at the table with the person in the wheelchair. "Deniz's bus would leave in 15 minutes."*

On the scale given to them, participants are asked to rate which emotions, thoughts, and behaviours Deniz might have experienced in the specified situation. While ordering the options, participants indirectly give clues about their feelings, thoughts, and behaviour when in such a situation.

Procedure: The primary author briefly described the study to administer the surveys. Then, the link to the survey was sent electronically to students in eligible courses with permission from faculty members. The electronic survey consisted of a descriptive characteristics form and MAS. Consent was obtained at the beginning of the study, with each student permitting their information to be used for educational purposes or scientific research. Responses were collected anonymously. It took approximately 15 minutes to answer the survey questions.

Statistical analysis: Data were analysed using IBM SPSS, version 27.0 (I.B.M. Corp., Armonk, NY). The Kolmogorov-Smirnov test was used to test the normality distribution of the research data, and it was determined that the data conformed to a normal distribution ($p>0.05$) (Tabachnick et al., 2013). Descriptive statistics calculations used frequency, percentage, minimum and

maximum values, and mean and standard deviation. To determine the difference between students' descriptive characteristics and MAS score averages, a t-test was used to compare means with two groups, and one-way ANOVA was used to compare means with three or more groups. The homogeneity of variances was checked with the Levene test, and it was determined that the variances were homogeneous ($p > 0.05$). Bonferroni correction was used in group comparisons with statistically significant differences. This study accepted the statistical significance level as $p < 0.05$ (Onder et al., 2018).

Ethics: Permission to use the scale used in data collection was obtained from the relevant researcher. Institutional permission was obtained from the university where the research was conducted, and consent was obtained from the students who agreed to participate (by explaining the purpose of the study and the expected contributions from the research). Approval was received from the University Scientific Research Ethics Commission (24.05.2022-1).

Results

Seven hundred and sixty-six surveys were completed. Demographic data are displayed in Table 1. The majority of the students participating in the sample are female (87.5%), between the ages of 18-22 (93%), and have a medium economic level (81.5%). Approximately one-third (30.3%) of students are in their first year. The rate of people with a disabled family member is 5.5%, and the rate of people with disabilities in informal social contact is 27.5%. Approximately one-third of the students (39%) did not want to share the same house with a disabled person, 69.3% did not receive any education for disabled people, and 81.7% were not informed about legal regulations for disabled people.

The students' mean scores, minimum and maximum scores of the sub-dimensions of the Multidimensional Attitudes Scale Toward Persons With Disabilities are in Table 2.

Some answers nursing students gave to the items in the emotion subscale of MAS are shown in Table 3. According to the students, the emotions that may arise most in "Deniz",

depending on the event in the scenario, are anger (56.7%), depressive feelings (39.3%), fear (36.3%), and shame (35.2%).

Nursing students' responses to the MAS thought sub-dimension items are given in Table 4. According to the students, when faced with the situation "Deniz" was in, the most common comments were "Why wouldn't it be nice to meet her?" (47.9%) and "If I start a conversation, he/she will like it" (42.9%).

Nursing students' responses to the items in the behaviour sub-dimension of the MAS are given in Table 5. According to the students, the possible behaviours of "Deniz" are "moving to another table" (74.2%) and "getting up and leaving" (63.3%).

Nursing students' attitudes towards disabled individuals according to their descriptive characteristics are shown in Table 6. Women's thinking subscale and scale total score were higher than men's. When students' attitudes and behaviours towards disabled individuals were compared according to grade levels, a statistically significant difference was found in the thought ($p < .001$) and behaviour sub-dimension ($p = 0.031$) and the scale total scores ($p = 0.009$). Bonferroni correction ($p < 0.008$) was made to determine which group caused the difference, and it was seen that the thought and behaviour subscale and scale total scores of fourth-grade students were significantly higher than other grades.

No statistically significant difference was found between the student's parents' educational status and attitude scores. A statistically significant relationship was found between the status of having a disabled person in the immediate environment and the students' thinking sub-dimension ($p < 0.001$) and total scale scores ($p = 0.008$). The thinking sub-dimension and full-scale scores of students who had disabled individuals in their close circle were found to be statistically significantly higher ($p < 0.05$). It was determined that the students' scale total and sub-dimension score averages differed depending on whether they received information about the approach to disabled individuals and legal regulations for disabled people ($p < 0.05$).

Table 1. Student demographics and reported contact with people with disabilities (n=766)

Demographic data		n	%
Gender	Female	670	87.5
	Male	96	12.5
Age	18-22	714	93.2
	23-27	52	6.8
Academiz level	First year	232	30.3
	Second year	177	23.1
	Third year	174	22.7
	Fourth year	183	23.9
Income	Income less than expense	131	17.1
	Income equal to expense	624	81.5
	Income more than expense	11	1.4
The place of residence	Family house	219	28.6
	Student house	61	8
	Dorm	486	63.4
Mothers' education level	Primary school*	364	47.5
	Seconsary school	156	20.4
	High school	181	23.6
	Undergraduate	65	8.5
Fathers' education level	Primary school**	207	27
	Seconsary school	140	18.3
	High school	252	32.9
	Undergraduate	167	21.8
Type of contact with people with disabilities			
Close family member	Have	42	5.5
	Absent	724	94.5
Informal social contact	Have	211	27.5
	Absent	555	72.5
Wanting to share the same house with a disabled person	Yes	467	61
	No	299	39
Getting educated about disability	Yes	235	30.7
	No	531	69.3
Having information about legal regulations for disabled people	Yes	140	18.3
	No	626	81.7

*34 literate individuals were added to this group.

**8 literate individuals were added to this group.

Table 2. Students' MAS scores

Sub-dimensions	Mean ±SS	Min-Max
Emotion	3.17±0.83	1-5
Thought	4.05±0.77	1-5
Behaviour	4.12±0.7	1-5

Table 3. Students' MAS emotion sub-dimension

Emotion	None				Too much					
	n	%	n	%	n	%	n	%	n	%
Anger	40	5.5	50	6.5	99	12.9	143	18.7	434	56.7
Comfort	244	31.9	230	30	163	21.3	94	12.3	35	4.6
Peace	252	32.9	186	24.3	200	26.1	95	12.4	33	4.3
Depressed	29	3.8	73	10.3	183	23.9	174	22.7	301	39.3
Fear	3	4.2	116	15.1	154	20.1	186	24.3	278	36.3
Shame	83	10.8	104	13.6	152	19.8	157	20.5	270	35.2
Pity	67	8.7	86	11.2	167	21.8	183	23.9	263	34.3

Table 4. Students' MAS thought sub-dimension

Thought	None				Too much					
	n	%	n	%	n	%	n	%	n	%
He seems like a normal guy.	21	2.7	77	10.1	195	25.5	252	32.9	221	28.9
We can get along really well with him.	6	0.8	32	4.2	160	20.9	259	33.8	309	40.3
He looks friendly.	7	0.9	22	2.9	136	17.8	278	36.3	323	42.2
I enjoy meeting new people.	22	2.9	45	5.9	144	18.8	229	29.9	326	42.6
He'll enjoy meeting me.	16	2.1	38	5	174	22.7	283	36.9	255	33.3
I can always talk to him about issues that concern us both.	15	2	44	5.7	151	19.7	231	30.2	325	42.4
I can make him feel more comfortable	9	1.2	30	3.9	147	19.2	262	34.2	318	41.5
Why wouldn't it be nice to meet him?	7	0.9	30	3.9	125	16.3	237	30.9	367	47.9
If I start a conversation, he/she will like it.	8	1	22	2.9	135	17.6	275	35.9	326	42.9

Table 5. Students' MAS behavior sub-dimension

Behaviour	None				Too much					
	n	%	n	%	n	%	n	%	n	%
Avoid	7	0.9	29	3.8	102	13.3	200	26.1	428	55.9
Get up and go	10	1.3	26	3.4	81	10.6	164	21.4	485	63.3
Reading the newspaper or talking on the mobile phone	16	2.1	42	5.5	100	13.1	178	23.2	430	56.1
Keep doing whatever you're doing	51	6.7	114	14.9	207	27	187	24.4	207	27
Find an excuse to leave	16	2.1	38	5	96	12.5	164	21.4	452	59
Move to another table	8	1	26	3.4	56	7.3	108	14.1	568	74.2
If there is no initiative from the other party, start the conversation	35	4.6	67	8.7	164	21.4	308	40.2	192	25.1
Start a conversation	25	3.3	53	6.9	159	20.8	282	36.8	247	32.2

Table 6. Students' attitudes towards disabled individuals according to their descriptive characteristics

Descriptive Characteristics		n	Emotion sub-dimension Mean±SS	t/F p	Thought sub-dimension Mean±SS	t/F p	Behaviour sub-dimension Mean±SS	t/F p	MAS total score Mean±SS	t/F p
Gender	Female	670	44.48±11.46	<i>t</i> =0.506	36.86±6.8	<i>t</i> =3.369	33.27±5.33	<i>t</i> =3.160	114.62±16.65	<i>t</i> =2.632
	Male	96	43.83±13.38	0.613	34.02±7.86	<0.001	30.89±7.1	0.002	108.75±20.93	<0.01
Academik level	First year	232	44.73±10.74	<i>F</i> =.558	35.46±7.53	<i>F</i> =8.198	33.23±5.59	<i>F</i> =2.964	113.43±17.71	<i>F</i> =3.878
	Second year	177	44.63±12.4	.643	37.55±6.75	<0.001	33.35±5.25	0.031	115.54±17.09	0.009
	Third year	174	43.39±11.58		35.21±6.35		31.86±5.99		110.47±16.08	
	Fourth year	183	44.39±11.71		38.04±6.72		33.34±5.59		113.88±17.34	
Income	Low	131	44.27±13.01	<i>F</i> =0.612	36.35±7.79	<i>F</i> =0.536	32.37±6.63	<i>F</i> =1.912	113±21.64	<i>F</i> =0.214
	Middle	624	44.35±11.46	0.542	36.57±6.83	0.585	33.14±5.39	0.149	114.08±16.32	0.808
	High	11	48.27±9.78		34.45±7.11		30.72±5.6		113.45±17.4	
The place of residence	Family house	219	45.05±11.27	<i>F</i> =2.447	36.38±7.7	<i>F</i> =0.382	32.55±6.16	<i>F</i> =2.173	113.99±17.48	<i>F</i> =0.122
	Student house	61	46.93±12.26	0.087	35.86±7.02	0.682	32.04±5.39	0.115	114.85±16.97	0.677
	Dorm	486	44.39±11.71		36.64±6.67		33.28±5.39		113.71±17.35	
Mothers' education level	Primary school	364	44.43±11.82	<i>F</i> =0.744	36.54±6.75	<i>F</i> =0.142	33.31±5.45	<i>F</i> =1.208	114.29±17.1	<i>F</i> =0.340
	Secensary school	156	43.95±12.56	0.526	36.73±7.13	0.935	32.98±5.75	0.306	113.67±18.11	0.797
	High school	181	45.24±10.89		36.35±7.32		32.33±5.76		113.94±17.03	
	Undergraduate	65	42.90±11.24		36.15±7.31		32.97±5.91		113.88±17.34	
Fathers' education level	Primary school	207	45.31±11.89	<i>F</i> =0.695	36.34±6.54	<i>F</i> =1.341	33.59±5.6	<i>F</i> =2.355	115.56±16.51	<i>F</i> =1.373
	Secensary school	140	43.59±12.43	0.555	37.23±7.09	0.260	33.46±5.11	0.071	114.29±17.17	0.250
	High school	252	44.31±11.39		36.55±7.22		32.68±5.91		113.55±18.25	
	Undergraduate	167	44.06±11.37		35.66±7.13		32.97±5.63		113.88±17.34	
Close family member	Have	42	47.09±12.28	<i>t</i> =1.535	38.02±6.73	<i>t</i> =1.442	33.52±5.73	<i>t</i> =0.644	118.64±18.94	<i>t</i> =1.831
	Absent	724	44.24±11.67	0.125	36.42±7.01	0.150	32.94±5.63	0.520	113.61±17.21	0.068
Informal social contact	Have	211	45.51±12.34	<i>t</i> =1.622	38.04±6.45	<i>t</i> =3.779	33.01±5.96	<i>t</i> =0.121	116.57±18.47	<i>t</i> =2.658
	Absent	555	43.97±11.44	0.105	35.92±7.12	<0.001	32.96±5.5	0.904	112.86±16.79	0.008
Getting educated about disability	Yes	235	47.29±11.4	<i>t</i> =4.609	37.43±6.65	<i>t</i> =2.45	33.94±4.91	<i>t</i> =3.4	118.67±16.4	<i>t</i> =5.17
	No	531	43.11±11.63	<0.001	36.09±7.12	0.015	32.55±5.87	<0.001	111.76±17.33	<0.001
Having information about legal regulations for disabled people	Yes	140	46.3±12.43	<i>t</i> =2.128	38.22±6.23	<i>t</i> =3.219	34.22±4.94	<i>t</i> =3.190	118.74±16.42	<i>t</i> =3.695
	No	626	43.97±11.51	0.034	36.12±7.11	<0.001	32.7±5.74	0.002	112.8±17.36	<0.001

t: Independent sample test, *F*: One-way ANOVA

Discussion

In this study, the attitudes of nursing students of a state university towards disabled individuals and the factors related to their attitudes were evaluated.

In studies in the literature where the MAS was used, the results were evaluated and discussed based on the score obtained from the scale (Keklicek & Unsar, 2021; Radlińska et al., 2021; Leś & Lipko-kowALska 2022; Tomczyszyn et al., 2022). The scale indirectly evaluates the participants' feelings, thoughts, and behaviours towards the disabled individual through a case study. Researchers are trying to reach the respondent's attitudes towards individuals with disabilities. Considering that it is vital to causally examine the participants' responses and the average scores obtained from the scale, it was preferred to discuss the reactions and the scale scores in the current study.

It is seen that the feelings of the nursing students participating in the study towards the disabled individual are more damaging, unlike their thoughts and behaviour (Table 3). Anger is the emotion expressed most by the participants. Studies on the mechanism of anger report that anger is a secondary emotion and often occurs due to frustration and guilt (Dilekler et al., 2014). The fact that the participants stated that the feeling experienced by Deniz, who was alone with the disabled person in the sample scenario and had to leave after 15 minutes, would be anger, could be associated with feelings of frustration and guilt. The fact that other negative emotions were also frequently mentioned shows that the participants needed to recognise and cope with their own emotions regarding communication with disabled individuals. To avoid difficulties when working with disabled individuals, nurses and nurse candidates need to identify and cope with their feelings. Considering the importance of the support of healthcare professionals in breaking society's disability prejudice (Apaydin & Baris, 2021), the importance of this skill becomes evident.

The current study observed that the participants were more positive in the thought dimension but more damaging in the behavioural dimension. In the case study, regarding the behaviour of the main person

when left alone with a disabled person, more than 50% of the participants considered it very likely that he would act such as "moving to another table", "leaving away", "staying away", and "reading the newspaper or talking on the phone". This shows that people may have difficulty coping with their emotions in certain situations, even if they have theoretically positive thoughts.

Some studies show that nursing students' attitudes towards disabled people are moderately or highly favourable in the sub-dimensions of thought and behaviour (Ten Klooster et al., 2009; Comez & Altan Sarikaya, 2017; Oliva Ruiz et al., 2020; Ozdemir & Karadag, 2021; Subay et al., 2022). There are also studies where nursing students' attitudes towards disabled people are not favourable (Kritsotakis et al., 2017; Dincer & Inangil, 2022). In a study conducted in Israel, it was reported that nursing students had negative attitudes toward their peers with disabilities (Shpigelman, 2016). The fact that disabled peers are included in the mentioned study makes the situation different. Although disabled rights are formally evaluated within the framework of human rights, it is thought that religion and culture will be practical in the traditional approach. In this context, cultural effects should not be ignored in the differences in results in studies conducted in different countries.

To better understand the attitudes of nursing students towards people with disabilities, it may be helpful to compare the attitudes of nursing students with the attitudes of their peers studying in other departments. Some studies in the literature present these comparisons. In a survey conducted by Naami & Hayashi (2012) on Ghanaian university students, it was reported that social work and sociology department students supported the segregation of disabled people in schools, even though they were in direct contact with people with disabilities. Calbayram et al. (2018) determined that nursing students' attitudes toward disabled people were more favourable than those of students studying in other units of the health field, such as child development and health management. In the study of Sahin & Bekir (2016), the attitudes of nursing students were found to be higher than the attitude scores of child development and health management students. When

international studies in the literature are examined, it is stated that Dutch nursing students have more positive and supportive attitudes towards disabled individuals than their peers who are not nursing students (Ten Klooster et al., 2009). The positive attitudes of nursing students were evaluated as promising, considering the role of nurses in providing health care services to disabled individuals and the impact of this situation on the quality of care.

It has been stated in the literature that attitudes towards disabled individuals differ according to gender. A group study conducted with nursing students found that male students' attitudes were more optimistic (Girli et al., 2016; Altunhan et al., 2021; Ozdemir & Karadag, 2021). Similarly, a study conducted with nursing and physiotherapy students in Spain revealed that male students had more positive attitudes towards disabled people than female students (Oliva Ruiz et al., 2020). There are also study results showing that the attitudes of female nursing students are more favourable (Calbayram et al., 2018; Subay et al., 2022). Some studies conducted in different university departments have also found that female students have more positive attitudes towards disabled people (Kritsotakis et al., 2017; Kekliceck & Unsar, 2021). In the current study, it was determined that female students had more positive attitudes. With the recent results, it is difficult to make a judgment about the relationship between gender and attitudes towards people with disabilities.

In this study, it is seen that fourth-grade students have more positive attitudes toward disabled individuals than first and third-grade students ($p < 0.05$). When the literature is examined, it is seen that there is no significant difference between the level of education and the attitude towards people with disabilities (Sahin & Bekir, 2016; Kritsotakis et al., 2017; Altunhan et al., 2021; Ozdemir & Karadag, 2021; Radlińska et al., 2021; Subay et al., 2022). Courses on health promotion in different health conditions may be included in other classes in the nursing curriculum. Differences in study results may also be due to curriculum differences.

Having taken a course on disability is a variable whose relationship with attitudes

towards disabled individuals has been investigated. The literature has reported that the education about disabled individuals given to undergraduate students studying in different fields, including nursing, positively affects the students' attitudes (Sahin & Guldenoglu, 2013; Top, 2018; DeLucia & Davis, 2009). In a study conducted in Saudi Arabia, it was suggested that students' lack of knowledge about disabilities caused their poor attitudes towards disability, and they pointed out the lack of disability-related topics in health sciences and medical education curricula and stated that more content was urgently needed (Alahmari et al., 2021). This study's results were compatible with the literature, and receiving education on disability positively affected attitudes towards disabled people. However, health sciences, especially nursing students, are more likely to encounter disabled individuals after graduation than graduates of other departments. It is wondered whether the education given to nursing students on this subject has a different effect than that of other departments. With a general finding, Kekliceck and Unsar (2021) reported that studying health further increases the positive attitude towards disabled individuals.

Conclusions: Determining the attitudes of nurses and student nurses, who constitute an essential part of the health service, towards disabled individuals is very important for public health so that disabled individuals can take a full and independent part in society without discrimination or negative attitudes. In this study, students' attitudes towards disabled individuals were moderately positive. Although this result is not harmful, it shows that students' attitudes towards disabled individuals should be made more positive, and they should gain competence in communication so that they do not experience negative emotions such as guilt, pity, anger and avoidance when they are together with disabled individuals. When our results are examined at all grade levels and in the context of the nursing profession, To increase the awareness and sensitivity of students, disability-related education should be added to the curriculum as a new course and updated instead of being treated as the subject of only one course, planning innovative projects on this subject, creating areas where disabled and

non-disabled individuals can coexist in universities, and finally providing disabled people with disabilities through qualitative studies. It may be recommended to determine in depth the factors affecting attitudes towards.

Limitations: This research was conducted with students from the nursing department of a state university. A limitation of this study is that the results can only be generalised to this group.

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