



ARAŞTIRMA / RESEARCH

Effect of practices for mentally disabled children on attitudes of nursing students

Zihinsel engelli çocuklar için yapılan uygulamaların hemşirelik öğrencilerinin tutumlarına etkisi

Filiz Özkan¹, Nevin Uslu², Handan Zincir¹

¹Erciyes University, Faculty of Health Sciences, Department of Public Health Nursing, Kayseri, Turkey

²Mehmet Akif Ersoy University, Department of Pediatric Nursing, Burdur, Turkey

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Abstract

Purpose: This study was conducted to determine the effect of practices for mentally disabled children on attitudes of nursing students towards disabled people.

Materials and Methods: The study was conducted in mixed design (experimental+content analysis). It was realized of third-year nursing students between February 5 and June 30, 2018. The quantitative data were collected before and after the study by using the Student Identification Form and Attitude Scale for Disabled People. Qualitative data were collected writing a letter of the students in the experimental group.

Results: It was determined that while the students in the experimental group had higher total mean scores and those decreased in the control group. The themes were determined as realizing the children with mental disabilities and what they can do, realizing their own prejudices about children with mental disabilities, understanding teachers in the education of children with mental disabilities, understanding the difficulties of families with mentally disabled children, gains obtained by working with the children with mental disabilities and their families.

Conclusion: The findings of this study are significant to education as nursing schools undergraduate education of nursing students to develop their knowledge, skills and attitudes towards mental disability children and their families.

Keywords: Attitude towards the disabled; disability child; nurse education

Öz

Amaç: Bu çalışma, zihinsel engelli çocuklara yönelik uygulamaların hemşirelik öğrencilerinin engellilere yönelik tutumları üzerine etkisini belirlemek amacıyla yapılmıştır.

Gereç ve Yöntem: Çalışma karma desende (deneysel+içerik analizi) yapılmıştır. 5 Şubat - 30 Haziran 2018 tarihleri arasında üçüncü sınıf hemşirelik öğrencileri ile yürütülmüştür. Nicel veriler, Öğrenci Tanıtım Formu ve Özürlülere Yönelik Tutum Ölçeği kullanılarak çalışma öncesi ve sonrasında toplanmıştır. Nitel veriler için hemşirelik öğrencilerinin yazdıkları mektuplar kullanılmıştır.

Bulgular: Deney grubundaki öğrencilerin ortalama puanlarının daha fazla olduğu ve kontrol grubundaki öğrencilerin puanlarının azaldığı belirlenmiştir. Temalar; zihinsel engelli çocukların ve neler yapabileceklerinin farkına varma, zihinsel engelli çocuklara yönelik önyargılarının farkına varma, zihinsel engelli çocukların eğitiminde öğretmenleri anlama, zihinsel engelli çocuğu olan ailelerin zorluklarını anlamak, zihinsel engelli çocuklar ve aileleri ile çalışmanın kazansızdıktır.

Sonuç: Bu çalışmanın bulguları, hemşirelik öğrencilerinin lisans eğitimlerinde zihinsel engelli çocuklar ve ailelerine yönelik bilgi, beceri ve tutumlarını geliştirmeleri için önemlidir.

Anahtar kelimeler: Engellilere yönelik tutum, engelli çocuk, hemşire eğitimi

Yazışma Adresi/Address for Correspondence: Dr. Nevin Uslu, Mehmet Akif Ersoy University, Department of Pediatric Nursing, Burdur, Turkey, E-mail: nuslu@mehmetakif.edu.tr

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INTRODUCTION

Children with disabilities are among the disadvantaged groups in the society. Therefore, these children face more barriers and inequalities in the biopsychosocial areas of their lives compared to the children without disabilities. These barriers and inequalities further increase the disadvantages they experience¹. Children with mental disability (MD) in this group face with individual, social and institutional prejudices, they are exposed to discrimination, and they are more socially stigmatized and excluded^{2,3}. The elimination of this exclusion and the availability of better services by disabled people should be in a positive attitude. Stigmatization and discrimination experienced by children with MD and their families can also affect negatively their access to healthcare services. In particular, the negative attitudes of healthcare professionals in providing health services to children with MD and their families⁴. Affect this situation and cause the families not to receive health services⁵. Therefore, it is very important to determine the attitudes of the nursing students towards disability and change their negative attitudes.

Recent studies for the disabled individuals have been conducted to examine the attitudes of the health care professionals (such as doctor, nurse, physiotherapists, social service expert) providing service to these individuals. It has been determined that nursing students have less positive attitudes towards disabled people and less willingness to approach them compared to other professionals⁶. The training of student nurses should be prepared to meet the increasing needs of the children and adults with MD living in the community⁷. In the literature, direct and indirect contact is reported to be important in developing positive attitudes towards children with MD⁸⁻¹². Accordingly, it is stated that academic programs and curriculum arrangements should be made in the education of those who will work with children with MD and compulsory courses and field experience should be provided¹³. It is emphasized that this issue should be included in the education of nursing students and they should perform practices^{6,7,14,15}.

There are limited number of studies evaluating the nursing students' attitudes towards disabled individuals¹⁶⁻²¹. In these studies, it has been reported that the student nurses generally exhibit positive attitudes towards disabled people. However, when

the attitudes of students in these studies were compared with the international literature, the attitudes of the Turkish nursing students were seen to be less positive compared to the others^{11,12,16-21}. Therefore more attitude interventions towards MD children are needed in the nursing schools. Although there are studies evaluating the attitudes of nursing students towards disabled individuals, no study was found evaluating the attitudes towards the children with mental disabilities and their families¹⁶⁻²¹. In addition, any study conducted via mix method to evaluate the effect of the practices applied to the children with MD and their families by nursing undergraduate students on their attitudes was not found. Therefore, the purpose of this study is to determine the effect of practices for the children with mental disabilities on the attitudes of nursing students towards disabled people.

MATERIALS AND METHODS

The study was conducted in mixed design (experimental+content analysis). The study was realized with third-year nursing students from the Faculty of Health Sciences at a state university in Turkey between February 5 and June 30, 2018. For the disabled people, there are mental retardation, autism spectrum disorder, and nursing care examples in disabled cases along with the subjects of the problems of disabled individuals and their families in the spring semester of the students. Analyses are conducted by showing related movies and presenting the related cases to the disabled people and their families. Students participate in the practice 2.5 days (8 hours in day) a week for three weeks after this curriculum. In these practices, students practice in twelve different fields. Only one of these areas is special education schools. This institution is a school where children with moderate mental disabilities are educated. Some children with mental disabilities have physical disabilities in addition to their disabilities.

Sample

The population of the study was composed of third-year nursing students from the Faculty of Health Sciences between February 5 and June 30, 2018. There were a total of 297 third-year nursing students. In order to calculate the sample size, statistical power (pre-power) analysis was conducted by using "Attitude Scale for Disabled People"²². In the analysis in which $\alpha=0.05$ and the power was 90%, the sample size was calculated as 70 people for the

experimental group (n=35) and control group (n=35). While selecting for the experimental and control groups, students were matched according to age, education level and number so that they had similar characteristics. Therefore they were stratified

according to age, education and number and were included in the intervention and control group by simple random method (Figure 1). The qualitative part of the study was conducted with the students in the experimental group (n = 35).

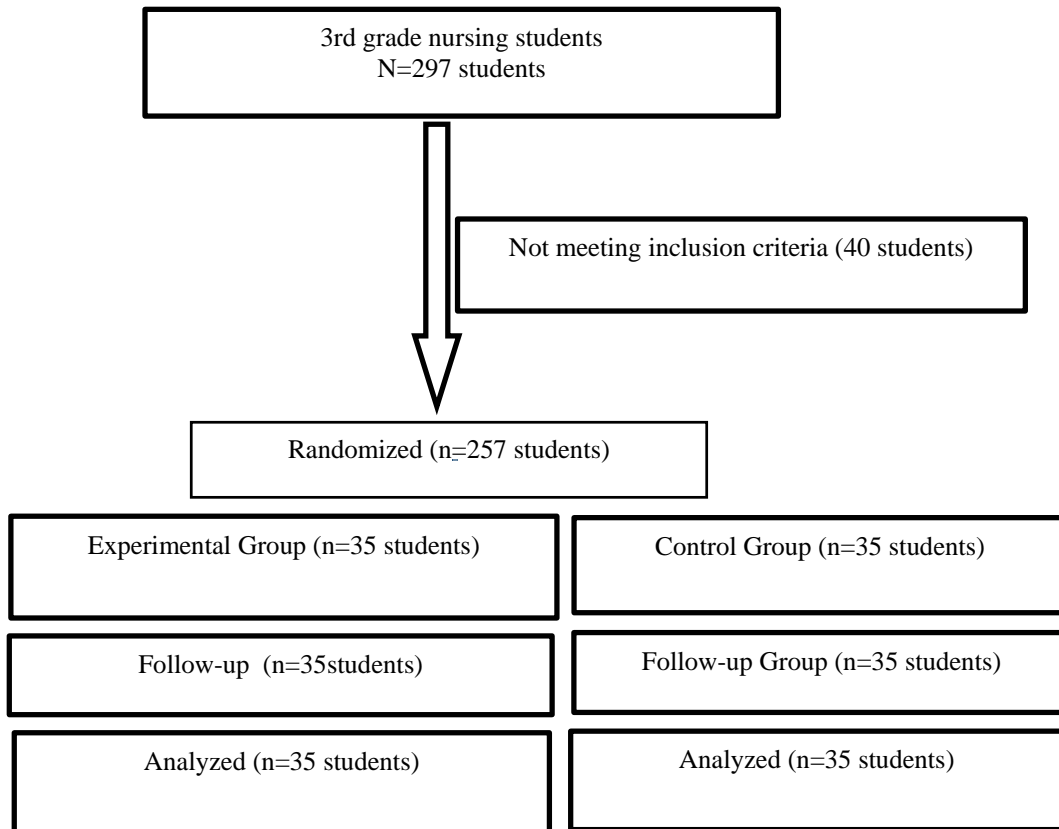


Figure 1. Participant chart

The students taking all spring semester modules of the third year, conducting their module course practice in a special education institution, practicing in accordance with the goals set for children with mental disabilities, voluntarily participate in the study, being able to speak Turkish were included in the experimental group.

The students taking all spring semester modules of the third year, not conducting their module course applications in a special educational institution, voluntarily participate in the study, being able to speak Turkish were included in the control group. Forty students who did not meet the inclusion criteria were excluded from the study.

Procedure

Academic permission from Erciyes University Faculty of Health Sciences and ethical approval from Erciyes University Social Sciences Ethics Committee (Approval date: 20/06/2017, application no: 34) were obtained. In addition, informed consent were obtained from the students.

The study is explained to students. No pressure has been created for them to participate and they have been provided to participate in the study on a voluntary basis. Disability-related issues were discussed and students were also discussed about raising awareness about disability. It was explained to the students that they would not take notes from their

responses to the questionnaires and the letters they wrote. They were asked to clearly state their opinions in questionnaires and to express themselves comfortably when writing letters. These situations enabled the students to volunteer for their participation.

The practices in the experimental group were carried out by two faculty members who are experts in this field. These faculty members advised students in these practices. During the practice, the students in experimental group were expected to develop the skills of: 1) Developing Professional Behaviors 2) Developing caregiving skills 3) Evaluating the special education institution and fulfilling their responsibilities related to the institution. In this respect, nursing students collected data about the characteristics, functioning, and employees of the special school. The students divided the institution into physical, social and biological environment groups and evaluated its eligibility for children with MD. Subsequently, certain problems were determined and they contributed to the solution of the problems by presenting solutions and cooperating with the school administration, teachers, and families. Nursing students made health screening of children in the special education and determined the problems and chronic diseases. They provided training and consultation to the children with problems, their parents and teachers and helped in facilitating access to social services. In addition, the students organized social programs such as chorus, theater, dance, drama, exhibition, breakfast activity for the children with MD and their parents.

The students in the control group was not worked with disabilities. They worked with different patients in the clinic.

Data collection

Data collection tools were applied to the students in the experimental and control groups before they went out for practice. After the end of the students' practices, data collection tools were applied again.

Measures

Student identification form

The Student Identification Form was developed by the researchers by reviewing the literature. The form is composed of 21 question about the descriptive characteristics of the students and their opinions and

preferences related to the children with mental disabilities.

Attitude Scale for Disabled People (ASDP)

ASDP was developed for disabled people in order to determine the attitudes of the society towards disabled people. Validity and reliability of the scale It was made by the Prime Ministry Administration for Disabled People. ASDP is a five-point Likert-type scale. In order to indicate to what extent the participants agree or disagree with the expression in each item of the scale, they respond by marking one of the options including "I completely agree" (5), "I agree" (4), "Undecided" (3), "I disagree" (2) and "I completely disagree" (1). Some items in ASDP are composed of positive attitude expressions and some are formed with negative attitude expressions. ASDP consists of 43 items and 6 subscales (education environments, interpersonal relations, working life, family life, personal characteristics, competence independent life). ASDP scores are evaluated over total score and subscale scores. The lowest and highest scores to be obtained from ASDP vary between 43-215. Getting high score from ASDP signifies positive attitudes towards disabled people²². The validity of the scale was tested by confirmatory factor analysis and it was determined that the factor loads of the items were between 0.37 and 0.78. In order to determine the reliability of the scale, Cronbach Alpha internal consistency coefficients was calculated for each factor also ranged from 0.56 to 0.83²². In this study, cronbach alpha value was calculated as 0.91 before the study and 0.89 after the study.

Writing a letter

In qualitative part of the study, a letter was written to the students. In order to understand and examine the experiences of nursing students in the experimental group after the study; they were asked to write a letter about how they perceive the mentally retarded children and their families, how the students feel, and whether the application causes any change in the approach to the mentally retarded children and their families. Afterwards, the content analysis of these letters was conducted.

Statistical analysis

In the study, IBM SPSS Statistics 22.0 package program was used to evaluate quantitative data (IBM Corp., Armonk, New York, USA). Shapiro-Wilk test, histogram, and *Q-Q* graphs were used to evaluate the

normality of data for numerical variables. General Linear Models Repeated Measures Variance was used in the assessment of numerical data. The Cronbach's alpha values were calculated on the scales used. The value of $p < 0.05$ was considered as statistically significant.

In the analysis of qualitative data, content analysis of the texts written by the students after the practice was carried out. Three independent experts analyzed the data. After the raw print of the data in the text, the data were coded by reading line by line. The coded

data were categorized and the themes were determined according to their content and meanings.

RESULTS

Quantitative results

The average age of nursing students in the study is 21.58 ± 0.97 years. It was determined that 90.0% of the students were girls, 95.7% did not know the definition of disability and 31.4% of them were disabled in their families (Table 1).

Table 1. Demographic characteristic of experimental and control groups

Variables	Experimental Group		Control Group		Total	
	n	%	n	%	n	%
Gender						
Female	29	82.9	34	97.1	63	90.0
Male	6	17.1	1	2.9	7	10.0
To know the definition of disability						
Know	1	2.9	2	5.7	3	4.3
Don't Know	34	97.1	33	94.3	67	95.7
The presence of a disabled person in the family						
Yes	12	34.2	10	28.6	22	31.4
No	23	65.8	25	71.4	48	68.6
Total	35	100	35	100	70	100

Table 2 shows ASDP and subscale mean scores of the students after the study. After the study, it was determined that the mean scores of total scales and

other subscales except Family Life and Competence Independent Life subscales showed a statistically significant difference between the groups ($p < 0.005$).

Table 2. Mean scores of the students in the experimental and control groups before and after the application

Subscale	Experimental Group		Control Group		Test*		
	Pre-test ($x \pm ss$)	Post-test ($x \pm ss$)	Pre-test ($x \pm ss$)	Post-test ($x \pm ss$)	p*	p**	p***
Education Environments	14.00±1.39	14.22±0.97	14.08±1.24	13.51±1.26	0.236	0.198	0.003
Interpersonal Relations	38.68±4.26	39.91±4.27	38.20±4.20	37.20±3.91	0.099	0.687	<0.001
Working Life	36.37±4.34	38.00±3.81	37.80±3.72	36.80±3.26	0.894	0.333	<0.001
Family Life	7.54±2.25	8.25±1.55	9.14±1.53	9.22±1.53	0.001	0.025	0.077
Personal Characteristics	28.08±3.27	29.85±3.20	28.77±3.03	27.97±2.68	0.380	0.078	<0.001
Competence Independent Life	47.34±4.88	47.28±5.38	48.31±5.69	47.25±5.10	0.695	0.158	0.205
Total Attitude Scale for Disabled People	172.02±14.59	177.54±13.95	176.31±16.25	171.97±13.69	0.849	0.536	<0.001

*General Linear Models Repeated Measures Variance Analysis * Group Effect ** Time Effect *** Group X Time Effect

Qualitative Results

In the study, how the nursing students felt in their experiences after the practice, how they perceive the children with MD, their thoughts and opinions about

the problems experienced by the children, and their families and the people around them were determined. Students' thoughts and opinions are discussed under five themes: 1) Realizing the children with mental disabilities and what they can do 2)

Realizing their own prejudices about children with mental disabilities 3) Understanding teachers in the education of children with mental disabilities 4) Understanding the difficulties of families with mentally disabled children 5) Gains obtained by working with the children with mental disabilities and their families.

Theme 1. Realizing the children with mental disabilities and what they can do

Nursing students stated that the children with disabilities exist in this life, they are different, children's movements attracted their attention, they are not like everyone else, but their happiness, sadness and loves are like everyone else and they do not even have feelings of hatred and jealousy like the other people. They stated that even a smile or saying hello made children with MD happy but they needed more love and care than normal children. In addition, the students stated that despite the disabilities of the children, they can get education and do nice things, achieve things, how they are happy when they succeeded, small responsibilities may be given to them and they realized that they should not think those children separately from the society. Some examples of the opinions of the nursing students reflecting this theme are given:

"I've seen how happy they are when they take part in a show and accomplish something. Thanks to this practice, I have gained more awareness. I did not know before that children with disabilities make such beautiful activities and shows in the week of people with disabilities. Thanks to our practice, I had the chance to participate in their event during the disability week. I have seen what they have accomplished and how happy they were when they succeeded. From now on, I decided to join their activities with my family and spend my spare time with them"(female student, 21 years old)

Theme 2. Recognizing their own prejudices about children with mental disabilities

Nursing students stated for their prejudices about children with MD that they feared, hesitated from the looks and acts of the students before and on the first day of the practice, felt bad when the children asked questions and considered that the children will exhibit aggressive behaviors. After the practice, the students realized that they ignored what children with MD exist with their prejudices, did not spend any time with people with disabilities and did not know what they experienced. One student even noticed and expressed the prejudices of her own mother: *"I called my mother and told her that the practice took place in a school*

for disabled people. She said, what did they send you there? Don't offer anything to them, don't be too warm, be alert at all times, they can be violent" (female student, 22 years old). After the practice, the students expressed that they saw many things they knew wrong about them, they thought that they helped them actually without knowing and understanding, children's problems are not that simple, their real lives are more difficult, real disability is the people excluding them from the society and the insensitivity towards disabled people. Nursing students stated that they learnt not to have prejudices to anyone, to look at life from different perspectives, talking and being friends with people with disabilities by leaving the prejudices behind with this practice.

From the example expressions of the students;

"When we first came to practice, the students' looks and their movements scared me a lot. At that day when I did not have any friend with me, I couldn't go out and make observation. On that day when I was wandering around with my friends in the institution, I was unintentionally afraid a lot and ran away when a child with touching obsession touched my back. I was very embarrassed by the look of that child and the parents around at that time. That's when I thought what I was doing. The next days, I got used to it slowly. I know this is incredibly difficult for them now. They've created an incredible awareness in my life." (female student, 21 years old)

Theme 3. Understanding teachers in the education of children with mental disabilities

The students practicing with children with MD expressed that the education of these children is difficult and the teachers work with care and patience.

From the example expressions of the students; *"I saw the patience of the teachers. How hard can it be for us to hold a pen and paint? I understood that when I saw it at the school, the teachers worked with patience every time when the children being stubborn not to do it."* (female student, 21 years old)

"How hard can it be to draw a straight line for us, but it is difficult or even impossible for some people with disabilities. The effort, trial of the mothers and teachers showed me what patience means and how the real helps should be." (male student, 22 years old)

Theme 4. Understanding the difficulties experienced by families with mentally disabled children

The students stated about the difficulties experienced by the families that the lives of children with MD and their families were hard and require patience,

providing care to children may lead to burnout, the families isolated themselves from the society since they were stigmatized and the children and their families were sometimes left alone. The students stated that they had prejudices before about that the mothers do not interest in the care of their children but they had changed their opinions with this practice. The students stated that they realized that mothers were struggling for their children and they gave great fights. In addition, in families with children who have MD, especially mother is the everything in the care of children, they understood once more that the motherhood is a sacred thing, and they learnt that they should give more importance and they should be more sensitive to these special mothers. In fact, one of the students stated that he understood better his elder sister from his family after the practice by saying that *“My sister has a disabled child. Before I came to the practice, I always thought that I was always with my sister and I was helping her. I noticed that I did not even understand my sister before. While she needed so much help”* (male student, 22 years old)

Other example expressions related to this theme;

“I saw that the families tried to avoid communicating with other people including the students other than the families who have children as they did since they are stigmatized. It is like these people are isolated from the society.” (female students, 21 years old)

Theme 5. Gains obtained by working with the children with mental disabilities and their families.

The nursing students stated that the practice helped them to give more specific care to this group and enabled to eliminate their prejudices. After this practice, they can better communicate with children who had MD, learnt how to approach them, and saw how the activities in the practice are important for the children and for themselves. One student stated that this practice should be seen as a part of life rather than a clinical practice.

“The practices I have done helped me look at this group more specifically. Sometimes I even learned something from them.” (female student, 22 years old)

“At the end of the practice, how I should approach them is still but a smaller problem for me. But I know now that I should get close to them.” (female student, 22 years old)

DISCUSSION

The key for effective nursing care for children with

MD is the attitudes of nurses. Enabling development of positive professional attitudes in nurses towards children with MD is one of the important gains of nursing undergraduate education⁷. In the literature, different teaching strategies including families and friends along with the children are recommended in order to develop positive attitudes towards MD^{7,9,10,23-26}. The present study is the first study in which the training and communication with the children with MD, their families and friends are used in both training and practice in nursing. In this study, it was remarkable that the scores of the nursing students who did not work children with MD in the practice decreased although they received training about the subject in the course.

In the recent studies, the attitudes towards individuals with MD are seen to be positive but prejudiced and discriminatory behaviors to these children and their families are an ongoing problem. It is stated in the literature that the concepts of prejudice and stigma overlap, the prejudice causes emotional reactions and discrimination as well as causing to exhibit negative attitudes⁸. From this point of view, it is necessary to change prejudiced thoughts in changing negative attitudes towards children with MD. The hypothesis of intergroup contact also addresses that the contact between different social groups can help to reduce prejudice. This theory suggests that the interaction with members of another group can lead an increase in the positive emotions when certain conditions such as equal status, cooperation and institutional support are met²⁷. In the studies, it has been seen that the quality contact is effective in changing prejudices and attitudes towards MD⁸⁻¹². Peterson and Quarstein stated in their study that professionals understood better the difficulties of living together with various obstacles after the disability awareness training²⁸. Read et al., expressed in their study that nurses and healthcare professionals understood the learning disability after the practice, small changes can lead great differences and they were aware more of which information/support are available for MD⁹. In the present study, the nursing students stated that after working with the children with MD and their families, they realized the children with MD and what they can do and their own prejudices about children with MD and understood better the difficulties experienced by the families and the teachers. In addition, the decreased attitude scores of the students who only received the training but not working with the children with MD and their families showed the

importance of establishing direct contact by studying with children with MD and their families.

Working with and understanding children with MD and their families generally affect nursing students' willingness, skills and attitudes related to caregiving positively. In the present study, the students stated that the practice helped them to give care to this group more specifically, enabled to eliminate their prejudices, after that practice, they can communicate with MD children better, they learnt how they need to approach them and saw how the activities in the practice are important for themselves and also for the children. Similar to the present study, Read et al., reported in their study that nurses were more willing to communicate with, listen to, and spare time for people with mental disabilities⁹. In the study conducted on patients with mental health problems, it was found that education and practices were useful in improving nursing behaviors²⁹. In the study by Melville et al., it was reported that after the intervention, the knowledge of the nurses about the health needs of people with MD increased and they believed that they could better meet the nursing needs of these people³⁰.

In this study investigating the attitudes towards the children with MD and their families, the its qualitative and quantitative results are consistent with each other in accordance with the purpose of the study. However, nursing students' attitudes about the life and family life independent from their attitudes towards the disabled people were seen not to change. This may be related to the fact that children with MD depend on their families and their families' lives are difficult. According to the qualitative findings, the students expressed the difficulties experienced by the children with MD and their families. Although the students' attitudes towards this situation did not change, it can be considered that they have gained awareness.

One of the limitations of this study was that majority of the sample was female. Therefore, the effect of the intervention could not be evaluated in terms of gender. Moreover, the study does not represent all nursing students in Turkey since it is limited with a school in the Central Anatolia region of Turkey. Further studies can be conducted in larger samples in the future. In addition, one of limitations of the present study is that data about how children with MD and their families perceived the changing attitudes of the nursing students were not collected.

This study is the first intervention study about developing positive attitudes towards children with MD and their families in nursing students. In the study, it was determined that the attitudes of the nursing students working with MD children in the special education school together with the compulsory module courses developed positively. Further experimental studies are needed to evaluate the attitudes of nursing students towards children with MD. In nursing education, a care skill including a holistic care approach containing family, school and friends by getting away from the medical care model for the children with MD should be gained. Therefore, in order to improve the knowledge, skills, and attitudes of nursing students towards children with MD, field experience should be provided as well as compulsory courses in undergraduate education. It can be recommended to conduct prospective studies evaluating the attitudes of the students experiencing both course and field experience in their professional life. In addition, it is recommended to conduct different studies to evaluate the nursing students' attitudes as well as care outcomes and satisfaction of children with MD and their families.

Yazar Katkıları: Çalışma konsepti/Tasarımı: FÖ; Veri toplama: FÖ, NU; Veri analizi ve yorumlama: FÖ, NÖ; Yazı taslağı: FÖ, NU, HZ; İçerğin eleştirel incelenmesi: FÖ, NU, HZ; Son onay ve sorumluluk: FÖ, NU, HZ; Teknik ve malzeme desteği: -; Süpervizyon: FÖ; Fon sağlama (mevcut ise): yok.

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