

## Original Article

## Stigma Tendencies of Nursing Students Towards Children With Disabilities: A Cross-Sectional Study

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### Abstract

**Background:** Negative communication and stigmatizing approach of healthcare professionals have an obstructive role in providing care and treatment for disabled children and their families.

**Objective:** This study was performed to determine stigma tendencies of nursing students towards children with disabilities.

**Methods:** This was a cross-sectional study. This study was performed with students who were studying at nursing department of a university located in Karabuk city of Turkey. Study was conducted with the participation of 211 students. 70.1% of the universe was achieved. A questionnaire form and a Stigma Scale were used for data collection in the study.

**Results:** 41.2% met disabled children during internship and 94.3% have stated that they experienced difficulties during providing care and treatment. 83.4% of the students have declared that they experienced difficulties with the disabled child her/himself during communication. It was also observed that 35.1% of the students had a high stigma tendencies. It was determined that stigma tendencies of the students who met disabled children during internships was significantly low ( $z = -3.375$ ,  $p = 0.001$ ).

**Conclusions:** It was detected that most of the students who met disabled children during internships have experienced difficulties in care and treatment practice and communication. It was concluded that students who experienced difficulties in communication with disabled children showed more discrimination and exclusion.

**Keywords:** Nursing students, stigma, stigma tendency, disabled children, nursing education

### Introduction

Disability is a complex, dynamic, multidimensional and controversial phenomenon. It is the inability of the individuals to perform their duties to undertake in the society due to incapability and their inability to adapt to their surrounding (Ozturk et al., 2016). In World Disability Report by WHO (2011); it was defined as difficulties experienced in all or one of three functional areas which are identified as inadequacy, limitation in activity and limitation in participation. According to this report, World Health Survey indicated the number of disabled

individuals at 15 years old and above, as 785 million (15.6%); Global Burden of Disease study predicted it as 975 million (19.2%) and pediatric disability (0-14 years old) as 95 million. According to UNICEF (2006) estimations, there were 150 million disabled children under 18 years old all over the world.

Since there is not a registration system for disabled population in Turkey as in many countries, there is a lack of information regarding quantitative and qualitative features of disabled individuals. Based on the results of Turkish Statistical Institute (TSI, 2002), that was the first

and the only large study performed to eliminate the lack of information regarding disabled individuals, it was determined that the ratio of disabled population within total population was 12.29% (approximately 8.5 million); and 18.9% of the disabled population were within 0-14 year old age group and 7.1% were between 15-19 years old.

Although general attitude of the society towards disabled individuals seems to be positive, disabled people are partly rejected in reality (Daruwalla & Darcy, 2005). It is well known that there are negative attitudes towards disabled people since the older ages (Seccombe, 2007). These negative attitudes within the society cause disabled individuals to stay deprived of services in social life. Especially due to the negative attitudes of healthcare professionals, disabled individuals are introduced limited services or the quality of service may stay insufficient (Rosenthal, Chan, & Livneh, 2006). Negative attitudes of the healthcare professionals are one of the main reasons preventing them to benefit from healthcare services (Marks, 2007; Ten Klooster et al., 2009).

One of the most significant negative attitudes affecting healthcare and rehabilitation of disabled individuals is stigmatization by healthcare professionals (Al-Zahrani, 2012). Stigma is based on negative beliefs and resulting prejudice, begins with labelling and ends with discrimination and exclusion (Yaman & Gungor, 2013). According to Goffman (2009), stigma is defined as the exclusion of an individual from social approval due to having a characteristic different from normal majority. In addition, it discredits the individual by presuming as dishonored and defective based on his/her physical or mental disability, race, ethnicity, religion, drug addiction or any disease that is considered as bad within the society. Health-related stigma is addressed as a negative evaluation of the individual due to skin diseases as leprosy, mental diseases, and specific diseases such as epilepsy and HIV/AIDS and his/her disability (Scambler, 2009).

Although studies on stigmatization by healthcare professionals in diseases such as skin, mental, epilepsy and HIV/AIDS were found in the literature review (Scambler, 2009; Kopera et al., 2015; Feyissa et al., 2012), no national or international study was found including stigmatization of disabled individuals by

healthcare professionals. However, it has been reported in many studies that disabled individuals (Al-Zahrani, 2012; Morgan & Lo, 2013; Rosenthal et al., 2006; Seccombe, 2007; Ten Klooster et al., 2009) and children (Colver, 2006; Matziou et al., 2009) were exposed to negative attitudes by healthcare professionals. In the study by Kupeli, Donmez, & Temel (2014) investigating the opinions of nursing students from different cultures for disability, problems experienced by the disabled individuals were asked to the nursing students; and 16.4% of nursing students in Turkey and 10.3% of the students in USA indicated that they experienced stigmatization problem. Again in another study, it was reported that disabled children were exposed to stigmatization (Colver, 2006).

Disabled children carry health-related risks more than general population, and their requirements for health services show more variations and increase based on the underlying problem (Bebbington et al., 2013; Inan et al., 2013). Besides, due to advanced technology and treatments, it is more possible for the nurses, who are often participated in the treatment and care of disabled children, to meet growing number of disabled children in healthcare institutions (Seccombe, 2007; Matziou et al., 2009). Providing the best quality nursing care to the disabled individuals in accordance with their rights and dignity is one of the most important occupational areas of nursing (Northway, Jenkins, & McMillan, 2014). If nurses who are employed with care of disabled adults and children, do not show them the required sensitivity and appropriate attitude, quality of nursing care is negatively affected (Seccombe, 2007; Al-Zahrani, 2012; Matziou et al., 2009). Therefore, nurses should develop and maintain a positive attitude towards disabled children during their education (Ten Klooster et al., 2009; Geckil et al., 2017).

In conclusion, nursing students will be in contact with disabled children in their social lives as well as in their professional lives as the nurses of future. All over the world including Turkey, many studies have been conducted to examine the attitudes of nursing students or nurses towards disabled children or adults (Seccombe, 2007; Ten Klooster et al., 2009; Matziou et al., 2009; Kupeli, Donmez, & Temel, 2014); however, no study was found in the literature evaluating their stigma tendencies. This study was performed to determine stigma tendencies of

nursing students towards children with disabilities.

## Methods

**Design and sample:** This cross-sectional study was performed with students who were studying at nursing department of a university located in Karabuk city of Turkey. Nursing education lasts for 4 years in overall Turkey. Students begin internships in the hospitals, schools, family health centers, institutions for disabled and private education centers for the practical part of several courses since the second term of first year.

The universe of the study was composed of all students (n=301) who were studying at 1st, 2nd, 3rd and 4th year of Nursing department of Karabuk University School of Health during spring term of 2015-2016 academic year. Sample selection was not made in the study; and it was aimed to reach all students, and it was based on voluntary basis. Students who did not approve to participate in the study, who were absent and on sick leave during the time of data collection were not included in the study. Study was conducted with the participation of 211 students. 70.1% of the universe was achieved.

**Instruments and data collection:** A questionnaire form including 22 open and closed-ended questions which were generated by the researchers and a Stigma Scale which was developed by Yaman and Gungor (2013) were used for data collection in the study. Questionnaire form and scale were given to the students by the researchers and they were asked to fill the form on their own.

Stigma Scale was developed by Yaman and Gungor (2013) in order to measure psychological stigma tendency. Stigma Scale includes 22 items and 4 subscales such as “discrimination or exclusion”, “labelling”, “psychological health” and “prejudice”. In order to grade scale items, 5 Likert-type grading was used including 1. Absolutely do not agree, 2. Do not agree, 3. Partly agree, 4. Agree and 5. Totally agree. The lowest score that can be obtained from the scale is 22, and the highest is 110. It can be stated that individuals who get a score below 55 from Stigma Scale (by multiplying a mean value of 2.5 and the number of 22 items) have a low stigma tendency and individuals who get a score above 55 have a high stigma tendency. There is not any item that is inversely scored in the scale.

Cronbach Alpha reliability coefficient of the scale was found to be 0.84, Spearman-Brown correlation coefficient was 0.85 and Guttman split-half value was 0.85. Cronbach Alpha reliability coefficient of the scale was found to be 0.87 for this study.

**Data Analysis:** Data entry was performed on computer for the analysis of data obtained from the study. Compliance of data with normal distribution was assessed by using Kolmogorov-Smirnov test and it was determined that data were not showing normal distribution. For data assessment, frequency and percentages were used; Mann-Whitney U test was used to compare two independent groups and Kruskal-Wallis test was used to compare more than two independent groups. Mann-Whitney U test with Bonferoni correction was used to determine which groups created the differences and Spearman correlation analysis was used to evaluate the relationship between age and stigma tendency. The results were assessed within a confidence interval of 95%, and  $p < 0.05$  was considered as statistically significant.

**Ethical Approval:** Ethical approval was taken from Karabuk University Ethics Committee (decree date: 22.06.2016, decree no: 2016/07) and institutional permit was obtained from the Directorate of Karabuk University Health School. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

## Results

211 nursing students (31.8% were at first year, 25.6% were at second year, 21.3% were at third year, 21.3% were at fourth year) were included in the study. Mean age of the students was  $21.64 \pm 1.97$  years old, and 86.3% were females. There was not any disabled individual within the family of 92.4% of the students.

41.2% of the students declared that they met disabled children at their internship places. It was determined that 94.3% of the students who met disabled children experienced difficulty in practicing care and treatment of these disabled children. Among the causes of their difficulties in care and treatment, “inability to know how to communicate” was ranked as second by 51.2% (Table 1). While 83.4% of the students declared

that they experienced difficulties in the communication with the disabled child, “inability to know how to behave” was found to be at second place by 77.8% among the causes of experiencing difficulty in communication. It was stated by the students that disability which created the most difficulty in communication was autism (Table 2). Mean total score of the students from stigma scale was  $50.81 \pm 11.19$ . When it was examined for subscales, it was found that “prejudice” subscale had the highest mean item score and “discrimination or exclusion” subscale had the lowest mean score. It was also determined that 35.1% of the students had a high stigma tendency (Table 3). It was found that there were negative correlations between age of the students included in the study and stigma tendency and subscales. It was determined that stigma tendency and subscale scores decreased as age increased (Table 4). Moreover, statistically significant differences were found between stigma tendency scores of the students based on their study year (Stigma scale,  $\chi^2_{k-w}=24.83$ ,  $p=0.000$ ; Discrimination or exclusion,  $\chi^2_{k-w}=11.31$ ,  $p=0.010$ ; Labelling,  $\chi^2_{k-w}=13.47$ ,  $p=0.004$ ; Psychological health,  $\chi^2_{k-w}=18.65$ ,  $p=0.000$ ; Prejudice,  $\chi^2_{k-w}=19.18$ ,  $p=0.000$ ). At the end of “Mann-Whitney U test with

Bonferroni correction” which was performed to determine where the difference was originated, it was found that the differences in total scale score and in all subscales were derived from that first graders had higher mean scores than third and fourth graders.

In the study, it was determined that mean score and mean rank of stigma tendency were higher among women compared to men; however, this difference was not statistically significant. Based on the presence of disabled individual within own family, no significant difference was found between mean scores of the students for stigma tendency. It was seen that stigma tendency and subscale mean scores of the nursing students who met disabled children during internship were lower than the ones who did not meet. This difference was found to be significant except mean scores of “prejudice” subscale. Stigma tendency and subscale mean scores of the students who experienced a difficulty in communication with the disabled child, were higher compared to the students who did not experience any difficulty. This difference was found to be significant for mean score of “discrimination or exclusion” subscale (Table 5).

**Table 1. Students’ status of meeting disabled children during internship**

Features	Number	%
Meeting disabled child during internship (n=211)		
Yes	87	41.2
No	124	58.8
Having difficulty while practicing care and treatment of disabled children (n=87)		
Yes (I did)	82	94.3
No (I did not)	5	5.7
The cause of difficulty in care and treatment *		
Hesitating with the thought of giving pain	51	62.2
Inability to know how to communicate	42	51.2
Inability to understand their needs	34	41.5
Meeting combative behaviors	26	31.7
Being afraid of having a bad response	9	10.9
Lack of permission from the family	7	8.5
Lack of permission from the employees of the institution	4	4.9

\* More than one answer were given. \*\* Percentage values were calculated on 82 individuals who had difficulties in care and treatment.

**Table 2. Students' status of communication with disabled children**

Features	Number	%
Experiencing difficulty in the communication with disabled child (n=211)		
Yes	176	83.4
No	35	16.6
Reasons of experiencing difficulty in communication*		
		**
Inability to know how to behave	137	77.8
Lack of sufficient information	73	41.5
Pity and worry	48	27.3
Being afraid of having a bad response	39	22.2
Being afraid of giving harm	12	6.8
Lack of permission from the family for communication	4	2.3
The type of disability which is the most difficult to communicate (n=211)		
Autism	70	33.2
Deafness	52	24.6
Other mentally disabled	40	18.9
Down syndrome	24	11.4
Blindness	21	10.0
Orthopedically handicapped	4	1.9

\* More than one answer were given. \*\* Percentage values were calculated on 176 individuals who experienced difficulty in communication.

**Table 3. Distribution of mean total and subscale scores of stigma scale**

Total and Subscales	Scores				Item Score	
	Range	Mean	SD	Min-Max	Mean	SD
Stigma Scale Total Score	22-110	50.81	11.19	24-85		
Discrimination or Exclusion	6-30	9.51	3.74	6-28	1.58	0.62
Labelling	6-30	14.77	4.24	6-30	2.46	0.70
Psychological Health	5-25	12.03	3.40	5-21	2.40	0.68
Prejudice	5-25	14.49	3.28	5-21	2.89	0.65
		<b>Scale cut-off score</b>		<b>n</b>	<b>%</b>	
High stigma tendency		Above 55		74	35.1	
Low stigma tendency		Below 55		137	64.9	

**Table 4. The correlations between age of the students and their stigma tendency and subscales**

	Stigma Scale	Discrimination or exclusion	Labelling	Psychological health	Prejudice
<b>Age</b>					
<b>r<sub>s</sub></b>	-,29**	-,22**	-,25**	-,15*	-,27**
<b>p</b>	,000	,001	,000	,024	,001

r<sub>s</sub>= Spearman Correlation Analysis \*\* Correlation is significant at the 0.01

**Table 5. Comparison of stigma tendency and subscales based on some variables**

Variables	Stigma Scale		Discrimination or exclusion		Labelling		Psychological health		Prejudice	
	n	Mean Sd (Mean Rank)	Mean Sd (Mean Rank)	Mean Sd (Mean Rank)	Mean Sd (Mean Rank)	Mean Sd (Mean Rank)	Mean Sd (Mean Rank)	Mean Sd (Mean Rank)		
<b>Sex</b>										
Women	182	51.1±11.3 (107.9)	9.5±3.8 (106.2)	14.9±4.2 (107.8)	12.1±3.4 (108.1)	14.5±3.2 (107.4)				
Men	29	48.5±9.8 (93.8)	9.1±2.9 (104.2)	13.9±3.9 (94.3)	11.4±2.9 (92.2)	14.0±3.4 (96.6)				
	<b>z*</b>	-1.157 0.247	-0.170 0.868	-1.114 0.265	-1.311 0.190	-0.891 0.373				
<b>p</b>										
<b>Presence of a disabled individual within the family</b>										
Yes	16	51.6±11.9 (109.7)	10.9±4.7 (118.1)	14.8±3.5 (105.6)	12.5±3.6 (116.4)	13.6±3.9 (86.7)				
No	195	50.7±11.1 (105.6)	9.4±3.6 (105.0)	14.7±4.3 (106.0)	11.9±3.3 (105.1)	14.5±3.2 (107.5)				
	<b>z*</b>	-0.256 0.798	-0.837 0.403	-0.023 0.981	-0.712 0.476	-1.316 0.118				
<b>p</b>										
<b>Meeting a disabled child during intership</b>										
Yes	87	47.4±9.9 (89.0)	8.7±2.8 (96.0)	13.4±3.3 (87.3)	11.3±3.2 (93.9)	13.9±3.3 (97.0)				
No	124	53.1±11.4 (117.8)	10.0±4.1 (112.9)	15.7±4.5 (119.1)	12.5±3.4 (114.4)	14.8±3.1 (112.2)				

	<b>z*</b>	<b>-3.375</b>	<b>-2.005</b>	<b>-3.735</b>	<b>-2.405</b>	-1.787
	<b>p</b>	<b>0.001</b>	<b>0.045</b>	<b>0.000</b>	<b>0.016</b>	0.074
<b>Experiencing difficulty in communication with the disabled child</b>						
Yes	176	51.3±11.3 (108.5)	9.7±3.9 (109.7)	14.9±4.2 (108.1)	12.0±3.4 (107.0)	14.5±3.3 (107.3)
No	35	48.3±10.1 (93.3)	8.3±2.4 (87.3)	14.0±4.1 (95.3)	11.7±3.3 (100.6)	14.2±3.1 (99.1)
	<b>z*</b>	-1.342	<b>-2.004</b>	-1.137	-0.574	-0.726
	<b>p</b>	0.180	<b>0.045</b>	0.255	0.566	0.468

\*Mann-Whitney U test

## Discussion

There are many health problems among disabled children outside their disability; and these children have more healthcare requirements (Bebbington et al., 2013; Inan et al., 2013; Thyen et al., 2003). Besides, with developing medical technology, it becomes more possible for the nurses to meet a growing number of disabled children at healthcare institutions (Seccombe, 2007; Matziou et al., 2009). In the study, it was observed that nearly half (41.2%) of the nursing students met disabled children at internship places even before starting professional life; but despite this, they experienced difficulties in care and treatment of these children due to reasons such as inability to know how to communicate (94.3%). These results obtained from the study suggest that the topics such as communication with disabled individuals and care of these individuals were not adequately involved in nursing education.

In the study, majority of nursing students (83.4%) stated that they experienced difficulty in the communication with disabled child. In the study by Sari and Altiparmak (2008) it was determined that midwives and nurses experienced difficulty in establishing communication while providing care to the disabled child (64.3%). Also in the other previous studies, it has been reported that healthcare professionals experienced difficulty in communication while providing care to the disabled individuals (Rosenthal et al., 2006; Marks, 2007; Ten Klooster et al., 2009). According to UNICEF's (2015) Report on

Knowledge, Attitude and Behaviors for Disabled Children which was formed by having face-to-face interviews with 2865 people in Turkey, it was determined that a great proportion of the participants like 63.7% had very few or no knowledge about disabled children. In this study, inability to know how to behave and lack of sufficient information were ranked as first two for nursing students among the reasons of experiencing difficulty in communication with disabled children. This outcome is important for creating an awareness among the students, providing knowledge to the students and affecting their behaviors with disability topics that may be included in the curriculum of nursing students. In this way, it is thought that communication skills of the nursing students regarding disabled child/adults would improve and this would positively affect the quality of care they provide.

Communication is an important problem in autistic children. The most significant feature of autism, that is also defined as a communication problem, is the difficulty experienced in establishing a relationship which is the basic element of communication (Siller & Sigman, 2002). Also in the study, it was seen that the type of disability which was the most difficult to communicate was autism; and it was followed by hearing and mental disability. In a study assessing attitudes and behaviors towards disabled children, it was reported that mentally disabled children were kept at a distance compared to other disabilities (UNICEF 2015).

In this study, stigma tendency of one third (35.1%) of the nursing students was found to be high. When stigma tendency was examined in terms of subscales, it was determined that tendency was highest in “prejudice” and lowest in “discrimination or exclusion” subscales. It was reported that stigma was based on prejudice which was a result of negative beliefs, continued with labelling and ended with discrimination and exclusion (Yaman & Gungor, 2013). Based on these literature data, stigma tendency of the students in the study was mostly in “prejudice” subscale and this was interpreted as a promising outcome. This reminds that stigma can be prevented by providing an education for awareness among the students.

In the literature, no study was found regarding stigmatization of disabled children by healthcare professionals; but, there are many studies showing that disabled individuals and children were exposed to negative attitudes by the healthcare professionals (Seccombe, 2007; Rosenthal et al., 2006; Ten Klooster et al., 2009; Al-Zahrani, 2012; Morgan & Lo, 2013; Colver, 2006; Matziou et al., 2009). It is believed that attitudes towards disabled people can be affected or changed by cultural values, traditional beliefs, education, religion, working experience, sex and age (Al-Zahrani, 2012). This study, it was found that there was a negative correlation between age of the students and stigma tendency and subscales; and stigma tendency of the students decreased as their ages increased. Moreover, it was determined that stigma tendency of the first year nursing students was higher than the third and fourth graders. Opposite to our results, in the other two studies examining the attitudes of medical students and nursing students towards disabled individuals, it was concluded that negative attitudes of the students increased as their ages increased (Gokce, Gunes, & Seyitoglu, 2016; Uysal et al., 2014). While decrease in stigma tendency of the students as their ages increased was interpreted as a positive outcome; it suggests that continuing education may decrease their stigma tendencies. In terms of sex, it was observed in the study that stigma tendency was higher among women including all subscales; but, these differences were not found to be significant. In the study by Matziou et al. (2009), it was reported that women had more positive attitudes towards disabled individuals compared to men; and this outcome was not found to be compliant with our study.

In the literature, it has been emphasized that a previous experience of the individual with disabled individuals affected positive attitudes (Mangili et al., 2004; Thompson, Emrich, & Moore, 2003). In our study, no significant difference was found between mean stigma tendency scores of the students based on the presence of a disabled child within their own families. Similarly, it was also determined in two other studies that the presence of a disabled individual among family, relatives or friends did not affect the attitudes (Gokce et al., 2016; Uysal et al., 2014). It was seen that stigma tendency of the students who met a disabled child at internship place was lower than the students who did not meet; and the difference was found to be significant in all subscales except “prejudice” subscale. In the other studies performed, it was concluded as in our study that nursing students had more positive attitudes as they provided care to a disabled individual and their knowledge level increased regarding the topic (Seccombe, 2007; Matziou et al., 2009; Thompson et al., 2003; Chen et al., 2002; Horner-Johnson et al., 2002). This outcome obtained from the study suggests that increasing the number of institutions including disabled children for internships and increasing the duration of internship may be important for developing a positive attitude towards the disabled people.

In the study, it was found that stigma tendency of the students who experienced difficulty in communication with the disabled child was higher than the students who did not experience; and this difference was found to be significant for “discrimination or exclusion” subscale. While this was interpreted as an expected outcome, it reminded that nursing students could exhibit negative attitudes towards disabled children such as stigma as a result of inability to know how to communicate or inadequacy of communication. In the literature, it was reported that negative attitudes of the healthcare professionals adversely affected the development of therapeutic communication with the disabled individuals (Morgan & Lo, 2013). Considering that both of them affected each other, education given to the nursing students for awareness is important for having a positive effect on their attitudes towards disabled as well as their therapeutic communication with disabled individuals.

**Conclusion and Recommendations:** It was concluded that most of the nursing students who



met disabled children during internship experienced difficulties in the care and treatment of these children, they experienced difficulties in communication; their stigma tendency was lower; and students who experienced difficulty in communication with disabled children discriminated or excluded them more.

Nursing students who are nurses of the future have important roles in the care and treatment of disabled children. Positive attitudes towards disabled individuals may enhance the quality of nursing care given. Therefore, it is required to keep social awareness of the nursing students for disabled children at a high level. This study can create an awareness among nurses for a possible stigma against disabled children and can provide significant contribution to the organization of nursing education programs. It is recommended to include topics such as communication with disabled individuals and care for these individuals in the nursing curriculum and to include institutions with disabled children for internships. Besides, it should be planned to include social activities that may develop positive attitudes towards disabled individuals in the curricula.

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