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Level Intercultural Tolerance of Nurses and Nursing Students and Related Factors: A Cross-Sectional Study¹²

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Abstract

Nurses have difficulty in transitioning from a mainly single-cultural world to societies believed to be marginalized. Nurses should be able to tolerate multiculturalism and accept intercultural differences. Tolerating the cultural diversity is among the basic principles of nursing care. The study aimed to describe the level of intercultural tolerance of nurses and determine the main influencing factors. A descriptive, analytical cross-sectional study was conducted on 867 nurses and nursing students. After descriptive statistical analysis, parametric tests were applied to determine between-variable associations, followed by multiple linear regression analysis. In our study, the mean of the intercultural tolerance scale (ITS) score of the participants was 46.88 ± 10.51 (min-max=18-81) points. As a result, seven independent variables were determined to be effective on intercultural tolerance in nurses and nursing students. In the multiple regression model, the predictors of ITS were age, gender, presence of relatives/friends of different faiths in communication, curiosity about different cultures, religions, lifestyles, desire to live in a place with a different culture, enjoying caring for people from different cultures, taking any training to develop cultural competence that these were factors influencing ITS in the evaluated nursing students and nurses. The intercultural tolerance level is moderate and is associated with many factors.

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28% of the factors affecting intercultural tolerance. It is recommended to repeat the study to determine other factors affecting intercultural tolerance.

Keywords: Nurse, Nursing students, Culture, Tolerance, Intercultural tolerance

INTRODUCTION

Tolerance means enduring, albeit difficult, unacceptable, and overcoming the differences (Kaya, 2014). Intercultural tolerance is defined as "the tendency to accept different cultures without prejudice" (Mendleson et al., 1997; Bakioglu & Sahin, 2014). It is possible for individuals or groups that seem different to live in society by tolerating these differences. Otherwise, social, moral, and political problems arise (Kaya, 2014). To solve these problems, tolerance is accepted as a virtue, life skill, responsibility, a conditioning factor, and value in modern societies (Wilson, 2014). The ability of individuals in the society to approach differences and contradictions with tolerance can be achieved by adopting and internalizing the tolerance by each of the individuals who make up the society (Dromgoole, 2013). The modern era is expressed not only as of the interaction of the states and the science of economics but also as the era where different cultures easily communicate with each other and live peacefully together (Kokarevich & Sizova, 2015). Intercultural tolerance is associated with professional competencies. One of the general competencies of vocational education is the ability to establish social interaction on the principles of intercultural tolerance. An important professional competence is the ability to organize intercultural education and interpersonal interaction (Левчук & Глушеня, 2020; Bessarab, 2021). It has been reported that the elements of being a culturally adequate nurse on a global scale include being aware of and respectful to the values and beliefs of people from different cultures, paying attention to ethical principles, openness, decentralization, solidarity, goodness, and having intercultural tolerance (Baumann & Goldberg, 2018). In a qualitative study conducted with nursing students (n=24) studying at the 1st and 4th grades at a university in Canada, the authors pointed out that cultural care included not only accepting the differences but also self-awareness, intercultural tolerance, and cultural communication (Vandenberg & Kalischuk, 2014).

Inherent in culturally competent nursing is the moral obligation to advocate for and protect the rights of the most vulnerable through social justice (Douglas et al, 2014). In a

study conducted in Turkey, it was determined that 22.5% of clinical nurses do not see the principle of social justice as a part of care (Tanriverdi, 2015). In another study conducted in Turkey more than half of the nurses (%57.1) were giving health care to a patient who came from abroad and %97.1 of these nurses stated that they had communicational difficulties due to cultural differences. %58.8 of the nurses defined transcultural nursing' as 'giving health care to patients from different cultures (Yaman Akatas et al., 2016). In another study conducted in Turkey, it has been determined that nursing students generally have a negative attitude towards victims of war. In addition, the rate of those who see it as a cultural threat to the country is high (Konak Korkmaz et al., 2021).

According to the Republic of Turkey Ministry of Interior Directorate General of Migration Management hosts people from many cultural differences. In 2019, approximately 44.5 million people entered and exited Turkey. Russia, Bulgaria, Germany, Ukraine, England, Georgia, Iraq, Iran, France, and the Netherlands were among the top ten countries that entered and exited. According to September 2021 data, the number of irregular migrants in Turkey is approximately 106 thousand. The number of refugees under temporary protection from Syria in Turkey is approximately 3.7 million. Approximately 31 thousand people are under international protection in Turkey. Individuals from different cultures live in all of Turkey's 81 cities (https://en.goc.gov.tr/). In addition to immigrants, Turkey is among the preferred countries in terms of health tourism. In addition to immigration, nurses encounter patients from different cultures due to health tourism in Turkey (Biri, 2021). In short, Turkey hosts individuals from many different cultures.

The increasing cultural diversity around the globe requires nurses to be able to provide care to patients belonging to many different cultures. Nurses should be able to maintain a holistic approach toward caring for both patients and healthy individuals from different cultures so as not to ignore individual needs arising from cultural differences (Tanrıverdi, 2017). To tolerate cultural diversity is among the basic principles of nursing care. These principles not only address issues at the personal level but also issues at the organizational culture level. At the same time, this approach is emphasized as the tolerance to differences (Van Tongeren et al., 2020).

It is important to promote intercultural tolerance care in healthcare. The failure of health professionals to understand/recognize the culture of the individual may lead to communication disorders, conflicts, inequalities in healthcare, discrimination, racism, and stereotypical judgments. Nurses, like all healthcare workers, are expected to provide healthcare a non-racist and non-ethnic centrist approach to the subjects they deal with. Nurses have difficulty in transitioning from mainly a single-cultural world to societies believed to be marginalized (Tanrıverdi, 2017). Representing the largest share in the healthcare workforce and having knowledge and discipline in social justice, nurses are in a good position to improve health equity and revolutionize health inequality (Thurman & Pfitzinger-Lippe, 2017). Cultural tolerance minimizes the impact of culture shock on individuals. In addition, it maximizes the intercultural experiences as well as enhancing the subjects' professional development and organizational effectiveness (Arslanovna, 2020; Al Majali & AlKhaaldi, 2020). Leininger, the founder of Transcultural Nursing, emphasized that assumption of all individuals, in the same way, would lead to stereotypical behaviors and negative consequences and preclude achieving the goals of care (McFarland & Wehbe-Alamah, 2019).

Nurses learn early that all patients must be treated with equality and not to judge when someone comes to us for health care. Nurses are taught to treat all patients with respect (Cuellar, 2021). Nurses should be able to tolerate multiculturalism and accept intercultural differences (McFarland & Wehbe-Alamah, 2019). In this context, it is thought that it is important to determine the cultural tolerance of nursing students and nurses who care for different cultures. This subject is considered to be important as it is a subject that has not yet been researched in nursing in Turkey. The results of this research are thought to be important in terms of creating awareness about intercultural tolerance. Therefore, our study aimed to determine the intercultural tolerance level and related factors in nurses and nursing students. The research questions were as follows:

Question 1. What is the intercultural tolerance level in nurses and nursing students?

Question 2. What are the factors related to intercultural tolerance in nurses and nursing students?

METHOD

Methodological Type and Design

A cross-sectional desing was used. This study was conducted in line with the STROBE checklist.

Setting

This research was conducted at a state university in western Turkey.

Sample and Data Collection

The universe of this cross-sectional study consisted of 867 subjects, 249 of whom were working as a nurse in a university hospital and 618 of whom were nursing students studying in the university. No sampling was performed, and we aimed to reach the whole universe as the study population. The inclusion criteria were determined as being a student of the Nursing Department of the specified University, working as a nurse in the specified university hospital, and being a volunteer to participate in the study. The subjects who graduated as a midwife or emergency medical technician were not included even if they worked as a nurse. The research was completed with a total of 709 (82% of the total number) people, including 525 nursing students (85%) and 184 nurses (74%). A total of 223 people, including 158 nursing students and 65 nurses, did not participate in the study (18% of the total number).

Instruments and Variables

The data were collected through a face-to-face questionnaire between April and October 2019. 10-15 minutes were allocated for each questionnaire. The data were collected with a questionnaire form. The questionnaire form was composed of questions about the participant's socio-demographic characteristics, Intercultural Tolerance Scale (ITS) items, and the features that may be related to ITS in line with the current literature (Leininger, 2009; Tanrıverdi, 2016; Sevig & Tanrıverdi, 2014).

The Intercultural Tolerance Scale (ITS), which is a 5-point Likert-type scale, was developed by Mendleson, Bures, Champion, and Lott in 1997 and adapted to Turkish by Bakioğlu and Şahin in 2014 (1-Strongly Disagree, 2-Disagree, 3-Neither, 4-Agree, 5-

Strongly Agree). A high ITS score indicates a high intercultural tolerance level of the subject and a low ITS score indicates a poor intercultural tolerance level. ITS consists of 18 items in total, 7 of which are positive items (1, 8, 9, 11, 12, 14, 16) and 11 are negative items (2, 3, 4, 5, 6, 7, 10, 13, 15, 17, 18). The Cronbach's alpha internal consistency coefficient of the scale was reported as 0.69, which indicates a sufficient internal consistency (Bakioglu & Sahin, 2014). We calculated the Cronbach alpha internal consistency coefficient as 0.83 in our study.

Data Analysis

The analysis of the data was conducted by the researchers using the Statistical Packages for the Social Sciences (version 19.0). Descriptive statistics and percentages on sociodemographic data were used to present the findings. The T-test was used in independent binary groups with normal distribution and the one-way analysis of variance was used in groups with more than two. When a significant difference was detected in more than two- group comparisons, the Bonferonni correction was applied. The Kruskal Wallis test was used to compare more than two groups in terms of non-normally distributed numerical variables. p ≤ 0.05 was accepted as statistically significant

Ethical Considerations

Before starting the study, the approval of the local Ethics Committee (Ethics Committee Approval No: 2011-KAEK-27/2019-E.1900020441), written permission from the Chief of the Research and Training Hospital (Number: 78714105-773.03-E.1900020442) and the Dean of the Faculty of Health Sciences (Number: 78714105-773.03-E.1900020443) were obtained. Furthermore, a written informed consent form was signed by each subject who agreed to participate in the study. We obtained written permission for the use of the ITS-Turkish version.

RESULTS

Sociodemographic Aspects

Most of the nurses and nursing students included in the study were women, single, their parents were primary school graduates, living in a small family, their family's and his/her income and expenses were equal, mostly urban-lived, and those who resided in the western part of Turkey.

Intercultural Tolerance Levels

The mean ITS score of the nurses and nursing students was 46.88 ± 10.51 (min-max=18-81) points (Table 1).

Table 1

Scale	Min-Max	Min-Max	X±SS	t	Р
		This research			
Nurses	18-90	18-81	52,00±8,51		
Nursing Students	18-90	26-71	45,17±10,56	-7,81	0,000***
Total	18-90	18-81	46,88±10,51		

ITS Scores of Nurses and Nursing Students

The Factors Related to Intercultural Tolerance

We found that the marital status, parental education level, having a child, the grade among students, family type, and the total income of the participant and his/her family were significantly related to the ITS scores in nurses and nursing students (p<0.05) (Table 2). However, the sex of the participant, the school he/she graduated from, her region of residence, and the residential area where he/she spent most of his/her life were not related to the mean ITS score (p>0.05, for all; Table 2).

Table 2

Analyses Between Social-Demographic Factors and ITS

Characteristics	n	%	ITS X±SS	t/F/KW	Р
Age (17-58)			$24,\!41 \pm 7,\!90$	r=,319**	0,000
Gender					
Female	531	74,9	46,39±10,46	t= 0,016	0,900
Male	178	25,1	48,34±10,53		
Education					
Students	379	53,5	45,32±10,50	KW=23,606	0,000***
Vocational high school	133	18,8	47,41±10,04		
Bachelor's degree	197	27,8	49,53±9,87		
Marital Status					
Single	587	82,8	45,67±10,56	KW=53,048	0,000***
Married	106	15,0	52,37±8,12		
Divorced	16	2,2	55,06±6,92		
Mother's Educational Status		,			
Illiterate	28	3,9	47,03±10,18		
Literate	51	7,3	48,82±10,54		
Primary school graduate	311	43,9	45,94±10,17	KW=19,979	0,001**
Secondary school graduate	118	16,6	$46,14\pm11,35$		-,
High school graduate	113	15,9	$46,15\pm10,31$		
University graduate	88	12,4	50,96±9,98		
Father's Educational Status	00	12,7	50,70-7,70		
Illiterate	4	0,6	52,00±8,40		
Literate	36	5,1	51,47±9,61	KW=27,281	0,000***
Primary school graduate	228	32,2	46,20±9,86	K W = 27,201	0,000
Secondary school graduate	142	20,0	45,69±11,03		
High school graduate	142	20,0 23,7	$45,49\pm10,79$		
University graduate	130	23,7 18,4	$49,76\pm10,16$		
• •	150	10,4	49,70±10,10		
Family Type Nuclear family	519	73,2	45,98±10,28	F=7,259	0,001**
				Γ=1,239	0,001
Extended family	142	20,0	49,16±11,07		
Fragmented family	48	6,8	49,83±9,80		
Family Income Expense Perception	407	(0.2	46.07+0.74		
Income and expense are equivalent	427	60,2	46,07±9,74	E 6 010	0.005**
Income less than expenses	192	27,1	47,22±11,49	F=5,319	0,005**
Income more than expenses	90	12,7	49,97±11,26		
Self Income Expense Perception	<u> </u>	10.0	16 05 10 05	D 6 600	0.00.14
Income and expense	346	48,8	46,35±10,36	F=5,582	0,004**
Revenue is less than expense	292	41,2	46,55±10,52		
Income more than expense	71	10,0	50,80±10,44		
Region of your Hometown					
Marmara Region	239	33,7	47,04±9,48		
Aegean Region	128	18,1	47,64±10,98		
Mediterranean Region	95	13,4	45,95±10,92	KW=8,811	0,267
Black Sea Region	73	10,3	47,12±10,70		
Central Anatolia Region	58	8,2	47,70±10,00		
Southeastern Anatolia Region	50	7,1	48,40±12,18		
Eastern Anatolia Region	47	6,6	45,04±12,07		
Abroad	19	2,6	41,57±8,38		
Most Happening Place		-	,		
City	465	65,9	46,27±10,27		
Town	91	12,5	47,83±10,64	F=2,336	0,097
Village	153	21,6	48,18±11,01	,	
Having Children		,9	-,,•*		
Yes	94	13,3	52,00±8,55	t=83,752	0,000***
No	615	86,7	46,10±10,56		0,000

The mean ITS score was significantly related to the presence of any relatives/friends from different beliefs (t=6.482, p=0.026), the presence of any relatives/friends from different cultures (t=6.946, p=0.009), being able to speak a foreign language (t=2.303, p=0.022), being curious regarding different cultures, religions, and lifestyles (t=11,337, p=0.001), watching movies / videos / documentaries on different cultures/beliefs (t=5.502, p=0.019), following different countries' mass media (television, newspaper, radio, internet) (F=10.354, p<0.001), communicating with people from different culture (t=9.628, p=0.002), enjoy caring for individuals from different cultures (F=90.684, p<0.001), and the presence of a history of attending any training in order to improve his/her cultural competence (t = 5.034, p = 0.025) (Table 3). On the other hand, the mean ITS score of the participants was not significantly related to the history of being abroad and caregiving to patients from different cultures/beliefs (p>0.05, for all; Table 3).

Table 3

Characteristics	n	%	X±SS	t/F	Р
Have you been abroad?					,225
Yes	152	21,4	47,71±10,96	t=1,092	
No	557	78,6	46,66±10,37		
Do you have relatives / friends of different					
faiths with you are communicating with?					
Yes	449	63,3	44,99±10,50	t= 6,482	0,026*
No	260	36,7	50,15±9,69		
Do you have relatives / friends in different cultures you are communicating with?					
Yes	548	77,3	45,30±10,27	t=6,946	0,009**
No	161	22,7	52,26±9,48		
Do you know a second language other than your native language enough to					
communicate?	357	50,4	45,98±10,35	t=2,303	0,022*
Yes	352	49,6	47,79±10,59		
No					
Are you curious about different cultures,					
religions and lifestyles?	624	88,0	45,59±10,06	t=11,337	0,001**
Yes	85	12,0	56,36±8,75		
No					
Do you watch movies / videos /					
documentaries about different cultures and					
beliefs?					
Yes	588	82,9	45,61±10,27	t=5,502	0,019*
No	121	17,1	53,05±9,44		
Do you follow the mass media (television, newspaper, radio, internet) of different countries?					

Analyses Between Some Related Factors and ITS

Yes	304	42,9	45,41±10,97	F=10,354	0,000***
No	177	25,0	49,84±10,56		
Sometimes	228	32,1	46,54±9,34		
Do you communicate with people from					
different countries on social media?					
Yes	195	27,5	45,54±11,37	F=4,883	0,008**
No	295	41,6	48,31±9,72		
Sometimes	219	30,9	46,15±10,53		
Would you like to live in a place with a					
different culture?					
Yes	512	72,2	44,96±10,40	t=9,628	0,002**
No	197	27,8	51,88±9,04		
Did you care for patients of different					
cultures, beliefs?					
Yes	416	58,7	46,64±10,34	t=0,722	0,471
No	293	41,3	47,22±10,74		
Do you like to care for individuals from					
different cultures?					
Yes	410	57,8	43,14±10,31	F=90,684	0,000**
No	108	15,3	55,76±6,68		
Partially	191	26,9	49,89±8,56		
Did you get any training to improve your					
cultural competence?					
Yes	162	22,8	46,55±11,27	t=5,034	0,025*
No	547	77,2	46,98±10,27		

These variables explain only 28% of the factors affecting intercultural tolerance. In the multiple regression model, the predictors of ITS were age, gender, presence of relatives/friends of different faiths in communication, curiosity about different cultures, religions, lifestyles, desire to live in a place with a different culture, enjoying caring for people from different cultures, taking any training to develop cultural competence that these were factors influencing ITS in the evaluated nursing students and nurses (Table 4)

Table 4

Independent	Unstandardized Coefficients		St. Coefficients			,	95,0% Confidence Interval for B		Collinearity Statistics	
variable						Lower	Upper	connearty baaistes		
	В	Std.	Beta	t	Sig.	Bound	Bound	Tolerance	VIF	
		Err.								
(Constant)	20,376	6,649		3,064	,002	7,320	33,431			
Age	,239	,076	,180	3,168	,002	,091	,388	,315	3,178	
Gender	2,006	,821	,083	2,445	,015	,395	3,617	,885	1,13	
Presence of										
relatives/friends										
of different faiths	2,220	,802	,102	2,769	,006	,646	3,794	,751	1,33	
in communication										
Curiosity about										
different cultures,										
religions,	4,540	1,247	,140	3,642	,000	2,092	6,987	,683	1,46	
lifestyles										
Desire to live in a										
place with a	3,070	,847	,131	3,623	,000	1,406	4,734	,778	1,28	
different culture										
Enjoying caring										
for people from	2,704	,418	,223	6,462	,000	1,882	3,525	,851	1,17	
different cultures										
Receiving any										
training to										
develop cultural	-1,978	,852	-,079	-2,322	,021	-3,650	-,305	,876	1,14	
competence										
	R= 0,55	Adjusted	$R^2 = 0,28$	F= 12,03	p<0,0	01 Durb	in Watson= 1,	87		

Multiple Linear Regression Between ITS and Variables

DISCUSSION

The mean ITS score of the nurses and nursing students was 46.88 ± 10.51 points, with the lowest score of 18 and the highest of score 81. The lowest score of the scale is 18 points and the highest score is 90 points. The scale does not have a cut-off line; thus, a higher score indicates a stronger intercultural tolerance level. Since we had not encountered a previous study exploring the intercultural tolerance in nurses and nursing students in the literature, we could not compare and discuss the results of our study with previous ones. Nevertheless, considering

the range of scores taken from the scale and the mean ITS scores of the participants, we can state that the intercultural tolerance of our study population was low.

The mean ITS scores of nurses and nursing students were higher in those who were divorced, whose mothers and/or fathers were university graduates, who or whose family had an income higher than the expenses, those with children, those who worked as a nurse and those from the south-eastern Anatolia Region. However, there was no significant relationship between gender, the last graduated school, the region of hometown, and the residential area where he/she spent most of his/her life and ITS score (Table 2). Since we did not encounter any previous study in the literature about the relationship between intercultural tolerance and sociodemographic characteristics in nurses and nursing students, we discussed our results with tolerance and other relevant study results.

Besides some previous studies (Bakioglu, 2013) reporting that gender affects the intercultural tolerance among university students, there are also publications stating that it does not have a significant effect (Korol 2017; Faried 2018; Al-Rabaani 2018; Altunsu Sönmez & Aksan, 2019). The studies about this subject have mostly reported that women generally have a higher tolerance than men. In a study by Mohammed (2019) with teachers (n=654) in Iraq, a significant relationship was found between the marital status and the mean tolerance score. Similarly, Sener Akkoc (2011) reported that marital status was independently associated with tolerance scores in his study with healthcare professionals working in the emergency department (n=237). These results are partially compatible with our study results. In another study conducted with university students (n=1234) in Iran and Turkey, Mameghani (2017) found no significant relationship between the level of tolerance and marital status. Similarly, in another study conducted with nurses working in the emergency room (n=260), no significant relationship was found between the marital status of nurses and their intercultural tolerance levels (Almalahy, 2017). These two different results are thought to originate from the cultural differences of the study groups. In a study conducted in Turkey by Bakioğlu (2013), while the mean ITS score of university students was significantly related to the maternal educational status and the grade they belonged to, the ITS score was not related to the paternal educational status and the students' income levels. In another study conducted in Turkey, the mean ITS score of the university students (n=694) studying in various departments (Education, Science, Economics and Administrative Sciences, Engineering, Health Sciences, Agriculture, and Theology) was not significantly related to the region of hometown and the place where the subject had lived before (Aydoğmuş, 2018). In the study of Almalahy with nurses (n=260) working in the

emergency department (2017), a significant relationship was found between having a child and the school they graduated from and the mean tolerance score. On the other hand, in a study with teachers (n=654) in Iraq, there was no significant relationship between having a child and the mean tolerance score (Mohammed, 2019). Vandenberg and Kalischuk (2014) reported that racism and prejudice attitudes of fourth-grade students positively changed regarding the intercultural tolerance in a focus group interview with nursing students (n=27) studying in the first and fourth grades in Canada. In their study with students (n=452) studying at the departments of architecture, law, literature, and engineering faculties of a university, Altunsu Sönmez and Aksan (2019) did not find a significant relationship between the grade of the students' education and their intercultural tolerance levels. Our results regarding the relationship between the mean ITS scores and the sociodemographic characteristics of the nurses and nursing students participating in our study were partially supported by other previous studies about intercultural tolerance.

The mean ITS score of the nurses and nursing students participating in our study was lower in those having relatives/friends from different beliefs/cultures, those who could speak a foreign language, those who were curious about different cultures, religions, and lifestyles, those who watched movies/videos/documentaries on different cultures/beliefs, those who followed different countries' mass media (television, newspaper, radio, internet), those who communicated with people from different countries on social media, those who desired to live in a place with a different culture, those who had given care to individuals from different cultures, and those who attended any training previously to improve his/her cultural competence (Table 3). There is a limited number of publications in the literature describing the parameters related to intercultural tolerance in nurses and nursing students. Therefore, our findings were discussed with the results of other related studies.

In a study investigating the tolerance of Japanese nurses to Indonesian nurse trainees (n=109), a significant relationship was found between countries visited by nurses and their tolerance (Tanaka et al., 2016). In an experimental study conducted with students (n=240) learning foreign languages at the University of Belgrade, it was concluded that foreign language learning increased the tolerance of an individual to cultural diversity as well as providing the recognition of different cultures (Gojkov-Rajic & Prtljaga, 2013). In a study with nurses (n = 156) in Japan, it was reported that learning a foreign language increased cultural sensitivity and therefore, had an effective role in gaining cultural competence (Toda & Maru, 2018). In a study by Zheyuan (2017) examining the intercultural tolerance of university students (n=511) from eight regions

of Ukraine, the authors asked the participants the question of "What is your attitude towards other races and nations?", and they determined that 49.9% of the subjects showed a positive attitude towards other races and nations, 5.3% were disturbed and 44.8% were neutral. In a study conducted with students studying at the International School of Hotel Management in Indonesia, it was found that intercultural tolerance was higher among those who communicated with students from different cultures on social media (Hastjarjo & Rahayu, 2017; Hastjarjo & Nuryana, 2018). It has been emphasized in past publications in the literature that intercultural communication positively affects intercultural tolerance (Kokarevich & Sizova, 2015; Novikova & Novikov 2015; Pasichnyk & Balashow 2016; Al-Rabaani, 2018; Eko & Putranto 2019). During the focus group meeting held by Faried (2018) to determine the tolerance perceptions of university students in Cairo, one of his students replied: "I have knowledge about living in other cultures and I am willing to travel and live in foreign countries for a while to broaden my horizons"; the student was evaluated as open-minded. In the study of Markey et al. (2018), the authors reported that the tolerance levels were low due to the uncertainty experienced by nurses and nursing students when they encountered patients from different cultures. In a semi-experimental study in which university students (n=103) in Russia underwent training for cultural competence and intercultural tolerance to Caucasian individuals, it was stated that at the end of the training, there was an increase in the intercultural tolerance levels of the Russian participants towards the Caucasian people (Lebedeva, Makarova & Tatarko, 2013).

In the multiple regression model, the predictors of ITS were age, gender, presence of relatives/friends of different faiths in communication, curiosity about different cultures, religions, lifestyles, desire to live in a place with a different culture, enjoying caring for people from different cultures, taking any training to develop cultural competence that these were factors influencing ITS in the evaluated nursing students and nurses. These variables explain only 28% of the factors affecting intercultural tolerance. The results of the above study differ in general from our findings. We think that this difference may be due to the fact that the study populations and the subject do not exactly overlap, as well as due to a number of different countries, the duration of the stay, and the expectations of the person from the travel may differ; those who have relatives and friends from different religions/beliefs and cultures may not have seen this process as an opportunity to recognize and understand different cultures, and may have remained in their own limited personal world; those may have bias while following the

social media and mass media of different cultures; those may have attended the training they took to develop cultural competence and the seminars due to necessity rather than a conscious approach.

Limitations

The research was limited to only one nursing department student and nurses working in a university hospital due to the limited time. Furthermore, the entire target universe could not be included as the study population due to the heavy workload of the nurses and since not all volunteered to participate in the study. The inadequacy of available research on a similar topic has limited the discussion.

CONCLUSIONS

According to the results, the intercultural tolerance of Turkish nurses and nursing students is moderate. The level of intercultural tolerance was found to be associated with sociodemographic and many other factors. These variables explain only 28% of the factors affecting intercultural tolerance. As a result, seven independent variables were determined to be effective on intercultural tolerance in nurses and nursing students.

Implications for Further Research and Practice

Increased cultural tolerance could also be expected to enhance the efforts of nurses to provide care that is congruent with the culture of patients. The number of immigrants in Turkey is increasing day by day. Nurses and nursing students should believe in the importance of social justice in care. They should show cultural tolerance towards dissimilar individuals from their own culture. In this study, the cultural tolerance of nurses and nursing students is moderate. It is thought that it is important to carry out studies to develop tolerance and to plan interventions. In this study, it was determined that the variables that had a positive effect on cultural competence had a negative effect on cultural tolerance. It is important to conduct research on why this occurs.

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The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

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