

**Original Article**

## **Determination of Nursing Students' Attitudes towards Evidence-Based Nursing: Turkey Example**

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### **Abstract**

**Objective:** The study was conducted to determine the nursing students' attitudes towards evidence-based nursing.

**Materials and Methods:** The cross-sectional study was carried out in the Faculty of Health Sciences of a university in the spring semester of the 2019-2020 academic year. Research data were collected by reaching 213 students from 1, 2, 3 and 4 grade nursing department students. Data; It was collected using the questionnaire form created by the researchers and the "Evidence-Based Attitude Scale towards Nursing" and evaluated using the number, percentage, mean, standard deviation, t test, Kruskal Wallis and One Way Anova analysis.

**Results:** It was determined that 88.3% of the students participating in the study were female students, 40.8% of the students were 1st grade students and 54.5% were graduates of Anatolian high school. When examining the mean scores of the Nursing Students' Evidence-Based Attitude towards Nursing Scale, it was determined that the mean score of the Emotions Sub-dimension was  $17.60 \pm 2.18$ , the Implementation Intention Sub-Dimension mean score was  $17.19 \pm 1.78$  and the Beliefs and Expectations Sub-Dimension mean score was  $28.06 \pm 5.27$ , and the total score of the scale was found to be  $17.19 \pm 1.78$ . It has been calculated as  $62.85 \pm 6.96$ .

**Conclusion:** It has been determined that the mean scores of the nursing students in the Nursing Students' Evidence-Based Attitude towards Nursing Scale, scale are at a high level.

**Key words:** Nurse, nursing student, evidence-based nursing, attitude.

### **Introduction**

Nursing is an applied profession that requires a significant combination of theoretical knowledge content with practical skills (Boztepe & Terzioglu, 2013). Therefore, nursing education requires planning that is made up of complementary theoretical and practical stages

and an approach that involves cognitive, sensory, and psychomotor learning areas which will impart students caregiving, decision-making, protective, advocating, managerial, rehabilitative, and educational roles (Daley, Durning & Torre, 2016). For the nursing profession to gain a professional identity, it is

necessary to establish the scientific basis of the profession and to integrate theory and practice. For this reason, it is very important for nurses to produce information from clinical practices and to present the obtained information in care services (Rodgers et al., 2018). Decision making based on scientific knowledge is the most determining factor in the professionalization of nursing (Younas, 2017). These expectations, published in Nursing Regulation, content 6 of the date 08.03.2010 in Turkey "nurses, nursing care plans based on the evidence, implements, evaluates and controls" as has been described (Turkey Ministry of Health Nursing Regulation, 2010). The fact that the responsibility of nurses to make evidence-based practice is defined in the regulation does not mean that this will be easily implemented. Studies in this area show that the implementation of evidence-based practices is a very complex and slow process (Hornthvedt et al., 2018; Camargo et al., 2018).

Therefore, nurse managers and researchers have a responsibility to facilitate this process. In order to develop facilitation strategies, nurses' feelings, thoughts, attitudes and behaviors about evidence-based practices should be known. Evidence-based nursing (CVS) is the process of making decisions by nurses using their clinical expertise, patient preferences, and the best evidence available in care settings where resources are available (Cui et al., 2018 Theofanidis & Dikatanidou, 2006). KDH has been one of the main policies of the health system in the last 20 years, and in many countries, it has been adopted that decisions are based on evidence, and evidence-based practice guidelines have been developed (Schaefer & Welton, 2018; Yancey, 2019).

However, when the literature on evidence-based nursing and research use is examined, it is understood that the gap between research and practice in nursing still continues (Cui et al., 2018; Schaefer & Welton, 2018). As a result, patients cannot receive the best nursing care and efforts are continuing to overcome this problem.

The transfer of theory and practice to clinical practice as a whole in nursing can be achieved with the cooperation of professionals. Students studying academically at the school also gain their professional competencies by seeing the working

conditions in hospitals. For this reason, as future professionals, determining the students' attitudes towards evidence-based practices in the education process becomes very important in providing data and raising awareness on this issue.

In this context, our study was conducted to determine nursing students' attitudes towards evidence-based nursing and the influencing factors.

## **Methods**

**Aim and Type of the Study:** This study was conducted in a descriptive and cross-sectional manner in order to determine the nursing students' attitudes towards evidence-based nursing and the influencing factors. The universe of this study was composed of nursing students studying at the nursing department of a university between November 20 and December 20, 2020 in the fall semester of the 2020-2021 academic year. Sampling selection was not used in the study, and the entire population was included in the sample.

**Ethical Aspect of the Research:** Ethics Committee Approval was obtained by applying to the Non-Interventional Clinical Research Ethics Committee before conducting the study. Institutional permission was obtained before starting the study. Student nurses who accepted to participate in the study were informed about the purpose and process of the study, and their written and verbal informed consents were obtained. The study was carried out according to the principles of the Declaration of Helsinki.

**Development of Data Collection Tools:** In the collection of research data, it was collected with the Individual Information Form and the Evidence Based Attitude Scale towards Nursing.

**Individual Information Form:** In this form created by the researchers, there are 4 questions that include the socio-demographic characteristics of the participants such as age, gender, class, and the high school they graduated from.

**The Evidence-Based Attitude Scale Towards Nursing:** The scale was developed by Ruzafa-Martínez et al. Jasmine Ayhan 2015 made its validity and reliability study in Turkey. The scale is a five-point Likert type (1 = strongly disagree, 2 = disagree, 3 = somewhat agree, 4 = agree, 5 =

totally agree). The scale consists of three sub-dimensions. Beliefs and expectations, intention to practice and feelings towards evidence-based nursing are sub-dimensions. The scale consists of 15 items with eight positive statements (items 1, 2, 5, 7, 9, 11, 13 and 14) and seven negative statements (items 3, 4, 6, 8, 10, 12 and 15). Items containing negative statements were coded in reverse. A minimum of 15 and a maximum of 75 points are obtained on the scale. Higher scores on the scale show that evidence-based attitude towards nursing is positive.

**Data Collection:** When the parametric test assumptions are fulfilled in the evaluation of the data by loading the data obtained from the research into the SPSS (data 22.0) program, the significance test of the difference between the two means when comparing two independent groups in terms of a variable obtained by measurement, Kruskal Wallis and Mann-Whitney U test when the parametric test assumptions are not fulfilled. was used and the level of error was taken as 0.05.

## Results

When the distribution of the students included in the study according to some introductory characteristics was examined, it was determined that 88.3% of the sample was female students, 40.8% of the students were first grade students and 54.5% were graduates of Anatolian High School (Table 1).

When examining the mean scores of the subscale of the subscale of the subscale of the Nursing Students, it was determined that the mean score of the Emotions Sub-Dimension was  $17.60 \pm 2.18$ , the Implementation Intention Sub-Dimension mean score was  $17.19 \pm 1.78$ , and the Beliefs and Expectations Sub-Dimension mean score was found to be  $28.06 \pm 5.27$ , and the total score of the scale was  $62.85 \pm 6.96$ . is calculated (Table 2). As a result of the comparison of nursing students'

total score and sub-dimension scores according to the demographic data of the participants, when the gender difference was examined, it was found that the intention to practice sub-dimension and the total scores of the women were significantly higher than the mean scores of the men ( $U = 1466.50$ ,  $p = 0.002$ ;  $U = 1754$ ,  $50$ ,  $p = 0.037$ ) (Table 3).

When the total scores of the subscales of the The Evidence-Based Attitude Scale Towards Nursing and the scale were compared according to the age of the nursing students, it was found that the beliefs and expectations sub-dimension scores were higher in individuals aged 21 and over than those aged 18 and 19, and those aged 21 and over were 18 and 19 years old. The scale scores were found to be significantly higher than those of the age group ( $X^2 = 18.590$ ,  $p = 0.001$ ;  $X^2 = 13.968$ ;  $p = 0.003$ ) (Table 3).

When the mean scores of the nursing students graduated from the school and scale and sub-dimensions of the scale were examined, it was found that the scores of the students who graduated from the health vocational high school and Anatolian-science high school were significantly higher than the students who graduated from the plain high school, in the application intention, sub-dimension and emotions sub-dimension ( $X^2 = 6.748$ ,  $p = 0.034$ ;  $X^2 = 13.749$ ,  $p = 0.001$ ) (Table 3).

When examining the nursing students' classes and the subscale mean scores of the scale, the scores obtained from the beliefs and expectations sub-dimension differ according to the groups. The scores of 4th grade compared to 1st, 2nd and 3rd grade were found to be significantly higher in this sub-dimension ( $X^2 = 7.738$ ,  $p = 0.052$ ) (Table 3).

**Table 1. Distribution of Nursing Students According to Some Descriptive Characteristics**

Characteristics			
		n	%
Age	18	65	30.5
	19	62	29.1
	20	55	25.8
	21+	31	14.6
Sex	Female	188	88,3
	Male	25	11.7
Grade	1th Grade	87	40,8
	2th Grade	55	25.8
	3th Grade	50	23.5
	4th Grade	21	9.9
Graduated School	Health Vocational High School	27	12.7
	Anatolian-Science High School	116	54.5
	Normal Highschool	70	32.9

**Table 2. Nursing Students' Average Scores for the Sub-dimension of the The Evidence-Based Attitude Scale Towards Nursing**

	Mean ± Standard Deviation Median ± min-max	Mean ± Standard Deviation Median ± min-max
Feelings	17.60±2.18	16 (12-20)
Intention to Implement	17.19±1.78	17 (13-20)
Beliefs and Expectations	28.06±5.27	28 (21-35)
Scale Total	62.85±6.96	60 (52-75)

**Table 3. Comparison of Nursing Students' Average Scale of The Evidence-Based Attitude Scale Towards Nursing and Introductory Features**

<b>Variables</b>	<b>Beliefs and expectations Median (min-max)</b>	<b>Intention to implement Median (min-max)</b>	<b>Feelings Median (min-max)</b>	<b>The Evidence-Based Attitude Scale Towards Nursing Median (min-max)</b>
<b>Gender</b>				
Woman	28.00 (21-35)	17.00 (13-20)	16.00 (12-20)	60.00 (52-75)
Male	28.00 (21-35)	16.00 (15-20)	16.00 (16-20)	60.00 (52-75)
	U=1955.00 p=0.145	U=1466.50 p=0.002*	U=1691.00 p=0.009	U=1754.50 p=0.037*
<b>Age</b>				
18	28.00 (21-35)	17.00 (13-20)	16.00 (12-20)	60.00 (52-75)
19	28.00 (21-35)	17.00 (13-20)	16.00 (12-20)	60.00 (52-75)
20	28.00 (21-35)	17.00 (13-20)	16.00 (12-20)	67.00 (52-75)
21+	35.00 (21-35)	17.00 (15-20)	16.00 (16-20)	68.00 (52-75)
	X <sup>2</sup> =18.590 p=0.001*	X <sup>2</sup> =0.480 p=0.923	X <sup>2</sup> =2.897 p=0.408	X <sup>2</sup> =13.968 p=0.003*
<b>Graduated School</b>				
Health Vocational High School	28.00 (21-35)	18.00 (13-19)	20.00 (12-20)	67.00 (53-68)
Anatolian-Science High School	28.00 (21-35)	17.00 (13-20)	16.00 (12-20)	60.00 (52-75)
Normal Highschool	28.00 (21-35)	16.00 (13-20)	16.00 (12-20)	60.00 (52-75)
	X <sup>2</sup> =3.740 p=0.154	X <sup>2</sup> =6.748 p=0.034*	X <sup>2</sup> =13.749 p=0.001*	X <sup>2</sup> =0.850 p=0.654
<b>Grade</b>				
1th Grade	28.00 (21-35)	17.00 (13-20)	16.00 (12-20)	60.00 (52-75)
2th Grade	28.00 (21-35)	17.00 (13-20)	20.00 (12-20)	60.00 (52-75)
3th Grade	28.00 (21-35)	18.00 (13-20)	16.00 (12-20)	67.00 (52-75)
4th Grade	35.00 (21-35)	17.00 (15-20)	16.00 (16-20)	68.00 (52-75)
	X <sup>2</sup> =7.738 p=0.052*	X <sup>2</sup> =0.020 p=0.568	X <sup>2</sup> =7.409 p=0.060	X <sup>2</sup> =3.928 p=0.269

## Discussion

In the study we aimed to examine the nursing students' attitudes towards evidence-based nursing; It can be said that the students participating in the study have positive and positive attitudes towards evidence-based nursing and their feelings are at a positive level. Students' beliefs and expectations about the benefits of evidence-based nursing were found to be moderate. It can be said that the students' level of importance given to evidence-based nursing and the benefits provided by the use of evidence-based nursing in clinical practice are at a positive level. When the literature was examined, it was found that Cruz's (2016) study conducted with 188 students found that students' awareness of CDH was high and participating in the course program related to CDH positively affected their attitudes and skills about CDH. Again, in the study of Adams (2009) conducted with 247 students to measure evidence-based practices, it was observed that student nurses thought evidence-based practice was important and they were open to new ideas. When the introductory characteristics of the students were examined, it was determined that the evidence-based attitudes towards nursing showed a significant difference in favor of female students according to the gender variable. Girls' beliefs and expectations, intention to practice, emotions and total scores were found higher than boys. It is thought that the fact that female students are more care-oriented than male students makes this difference. In the study of Karadagli (2016), the average point of professional values scale of female students was higher than that of men. In the study of Celik et al. (2015), it was found that female students' critical thinking dispositions were higher. In the studies of Ay and Akgol (2008) and Ozturk and Ulusoy (2008), it was determined that female students have higher critical thinking skills.

When the total scores obtained from the evidence-based nursing sub-dimensions and the scale were compared according to the age of the nursing students, it was found that the beliefs and expectations sub-dimension scores of the individuals aged 21 and over were higher than those of the 18 and 19-year-olds, and the 20-year-olds compared to the 18-year-olds. and the scale scores were found to be significantly higher than those of 19 years old ( $p < 0.05$ ).

In this context, it can be said that as the age levels of the students increase, their understanding of the necessity and importance of evidence-based nursing is more positive. It was found that the mean scores of the students' intention to practice and the emotions sub-dimension differed significantly according to their high school status ( $p < 0.05$ ). The scores of health vocational high school graduates were found to be flat and higher than those who graduated from Anatolian science high school.

Health vocational high school graduates have more clinical experience, so it is thought that they see the benefits arising from the practice of nursing in clinical practice. When the beliefs and expectations sub-dimension of the students were examined according to the class variable, it was found that 4th grade students' beliefs about the benefits of evidence-based nursing in nursing practices were significantly higher than other students ( $p < 0.05$ ).

It can be said that with nursing education and clinical practice, nursing students' beliefs about the necessity and importance of evidence-based practice have increased.

The fact that the students included in the study have a positive and high attitude towards evidence-based nursing shows that their awareness of the necessity of evidence-based nursing practices is at a good level.

**Limitations:** This study had several limitations. First, this study was conducted in only one university's nursing students, limiting the sample group. In addition,

**Conclusion:** In order to provide better quality and evidence-based care, which is the essence of nursing, it is recommended to organize evidence-based nursing training during nursing education and to ensure the continuity of positive care behaviors.

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