

Attitudes of Intensive Care Nurses towards Evidence-Based Nursing

Yurdanur Dikmen¹, Nasibe Yağmur Filiz¹, Fatma Tanrikulu¹, Dilek Yılmaz²,
Hürmus Kuzgun³

¹Sakarya University Faculty of Health Sciences Department of Nursing, Turkey

²Uludağ University Faculty of Health Sciences Department of Nursing

³Neşşehir Hacı Bektaş Veli University Semra ve Vefa Küçük Health College

Corresponding Author: Nasibe Yağmur Filiz

ABSTRACT

Aim: We have conducted this study to determine the attitudes of intensive care nurses towards evidence-based nursing.

Materials: The data of this study which has been conducted with a descriptive and sectional pattern between June and July 2016 have consisted of 70 volunteer nurses who work in a public hospital in the north-west region of Turkey. We have collected the data using Nurse Introduction Form and Attitude Towards Evidence-Based Nursing Questionnaire. In the evaluation of the data we have used number, percentage, average and standard deviation, One-way Analysis of Variance (ANOVA), and Independent t-Test among descriptive statistical analysis. We have taken the statistical significance value as 0.05.

Findings: Total mean score of the Attitude Towards Evidence-Based Nursing Questionnaire has been found to be 57.20 ± 9.06 . It is seen that the highest score of attitude (26.97 ± 5.50) is in the sub-dimension of beliefs and expectations towards evidence-based nursing. When we have compared nurses' education status' and working durations both in the occupation and in the intensive care, with their total scores of Attitude Towards Evidence-Based Nursing Questionnaire we have not found any significant difference. However, when nurses who follow results of scientific studies, evidence-based practices, occupational journals, and receive research methods education have been viewed regarding the total score of Attitude Towards Evidence-Based Nursing Questionnaire, the difference has been found to be statistically significant. ($p < 0.05$).

Result: We have determined that nurses who follow occupational journals and view results of scientific studies, who are informed about evidence-based practices and take research methods education after graduation have relatively positive attitudes towards evidence-based nursing.

Key Words: Intensive Care, Evidence-based Practice, Attitude, Nursing

INTRODUCTION

Today, with the increasing use of the communication technologies, the easy access to the knowledge and the introduction of new technologies into our lives have raised the expectations of the patients; whereas expectations towards professionalization of nurses also increase.

^[1] Within the professionalization of nursing, decision making based on scientific knowledge is the most decisive element. ^[2] And for this reason, it is necessary for

nurses to ground their care practices on evidence. ^[3]

Within the evidence-based nursing, while making decisions concerning the care of patients, nurses should use the research results and proven knowledge carefully, meticulously, in a clear and logical way taking into account the preferences of patients too. Thus it becomes possible to improve the quality and results of care, make a difference in clinical practices and outcomes of patient care, standardize the

care, increase the patient satisfaction and eliminate the obstacles that occur in the care process. [3-5] The literature sets forth that improving the quality and results of care, making a difference in clinical practices and outcomes of patient care, standardizing the care, and increasing the patient satisfaction is possible only through evidence-based practices. [6-9]

It is necessary for nurses, which constitute the largest group in the health institutions, to comprehend evidence-based practices to define the best evidence and adapt it to their practices. Determining the attitudes of nurses regarding evidence-based practices would help developing strategies concerning raising the amount of the evidence-based nursing practices. And to develop strategies that would quicken the evidence-based nursing process, the first step is getting information regarding the attitudes of nurses on the subject. [10] As Champion and Leach (1989) have indicated, since the attitude of nurses towards using research results, is an important precursor of their using behavior, the first step for developing strategies that would improve the evidence-based nursing practices must comprise determination of the attitudes of nurses regarding the topic. [11] Besides, in order for implementing the new practices, attitudes of nurses towards evidence-based practices is quite important. [5] Although there are international studies on the subject which evaluate the attitudes and opinions of nurses towards evidence-based practices. [7,12-15] we have observed that the number of national researches is rather limited in our country. [16] Accordingly, we have required conducting this research which aims to determine the attitudes of intensive care nurses towards evidence-based nursing and the factors that could affect these attitudes.

MATERIALS AND METHODS

This study has been designed as a descriptive and analytical one. The research has been carried out between June and July 2016 with nurses who work at a university hospital. We have left 30 nurses out of

scope who have been off-duty or on sick leave during the research or who have not accepted to participate in the research or in whose data gathering form we have detected a fault. And the sample of the research has consisted of 70 (70%) nurses who have been a volunteer to participate in the research.

Data Gathering Tools

Nurse Introduction Form: In this form, there are questions related to the occupational properties of nurses (work duration, knowledge about evidence-based practices, etc.) as well as their personal properties which are thought to affect their evidence-based practices (gender, age, education status, etc.).

Evidence-based Practice Attitude Scale: This scale was developed for measuring the attitudes of nurses towards evidence-based nursing by Ruzafa-Martinez and colleagues at 2011 in Spain; [5] its validity and reliability study was carried out by Ayhan and colleagues (2013). [10] The scale comprises 15 articles and three sub-dimensions. Eight of the articles (1, 2, 5, 7, 9, 11, 13, 14) contain positive, and seven of them (3, 4, 6, 8, 10, 12, 15) negative expressions; negative articles are coded through inverting. The scale has been prepared according to five-point Likert-type (1= strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree) its lowest score is 15, highest is 75. High scores show that the attitude of the participant towards evidence-based nursing is positive. The reliability quotient of the original scale is $\alpha=,85$. Sub-dimension reliability quotients are $\alpha=,86$ for Belief Sub-dimension, $\alpha=,63$ for Intention of Practice Sub-dimension, $\alpha=,70$ for Emotions Sub-dimension. [5] In this research the Cronbach Alpha inner consistency quotient has been calculated as 0.89; as for the sub-dimensions, it has been calculated between 0.70 and 0.89.

Sub-dimensions of the Attitude Towards Evidence-Based Nursing Questionnaire (ATEBNAQ) are as follows:

Beliefs and Expectations Towards Evidence-based Nursing Sub-dimension

includes articles (1, 2, 7, 9, 11, 13, 14) concerning beliefs and expectations of nurses related to the benefits of evidence-based nursing in clinical practices.

Evidence-based Practice Intention Sub-dimension includes (3, 5, 6, 12) articles regarding behaviors or intentions of nurses about performing evidence-based practices, perceived obstacles, workload, and use of the duration that is allocated for the education for evidence-based nursing.

Emotions related to Evidence-based Nursing Sub-dimension includes articles regarding the level of importance attributed to evidence-based nursing, benefits provided from the use of evidence-based nursing in the clinical practices and emotions of nurses regarding the subject. [16]

Ethical Dimension of the Research

Before conducting the research, we have taken written permission through email from the author who has carried out the validity and reliability study in our country. Besides, we have taken written permission from the institution in which we have carried out the research, both written and verbal consent from the nurses who have participated in the research.

Limitations of the Research

We have not used any sampling method in this research, and since we have not reached the whole sample, findings of the research cannot be generalized. The fact that the research has been carried out in one place, in intensive care unit, constitutes one of the limitations of this research. Besides, another limitation of this study is that it relies on own statements of the nurses who have participated in the research. Thus the results are limited to the answers of the nurses who have been included in the scope of research. The limitations of such researches, which arise from the inclination

of the participants for giving the expected answer applies to this study too.

Evaluation of the Data

We have carried out the analysis of the acquired data in the software package named ‘SPSS for Windows 20.0.’ Within the evaluation of the data we have calculated percentage distributions, ATEBNAQ sub-dimension article mean scores, standard deviations, and inner consistency quotients (Cronbach Alpha) of the scale and sub-dimensions. In the evaluation of the data among the descriptive statistical analysis', we have used number, percentage, average and standard deviation, One-way Variance Analysis (ANOVA), Independent t-Test and Pearson Correlation analysis. We have taken the value of statistical significance as 0.05.

FINDINGS

The average age of the nurses who have participated in the study was 28.25±6.26 (min-max: 21-44); 72.9% of them were female; 55.7% had bachelor’s degree; working durations of 40% were 2-5 years. And the working duration of 48,6% of nurses has been determined to be 2-5 years. Although 54,3% of them have been found to follow the results of scientific researches, 17.1% of them follow scientific journals. Besides, while the percentage of the nurses who have attended at scientific meetings has been determined as 40%, the percentage of the ones who have participated in studies as a researcher is 21.4%. It has been detected that 58.6% of the nurses have not been informed about evidence-based practices, and percentage of the ones who have received research methods education after graduation has been found to be 28,6%. Study results corresponding to sub-dimensions are given in Table 1.

Table 1: “ATEBNAQ” and Sub-dimension Mean Scores of the Nurses

Scale Sub-dimensions	Minimum and Maximum Scores obtained from the Scale	Mean Scores Avg±SD
“Beliefs and Expectations Towards Evidence-based Nursing”	8-35	26,97 ± 5,50
“Evidence-based Practice Intention”	8-20	14,27 ± 2,44
“Emotions related to Evidence-based Nursing”	6-20	15,95 ± 3,17
ATEBNAQ total score	30-75	57,20 ± 9,06

Attitude Towards Evidence-Based Nursing Questionnaire total mean score has been found to be 57.20±9.06. As is seen, lowest attitude score (14.27±2.44) is in the Evidence-based Practice Intention Sub-dimension, and highest attitude score (26,97±5,50) is in the Beliefs and

Expectations Towards Evidence-based Nursing Sub-dimension ([Table 1](#)).

Certain descriptive properties of nurses and distribution of mean scores corresponding to ATEBNAQ sub-dimensions are given in Table 2.

Table 2: Certain Descriptive Properties of Nurses and Distribution of Mean Scores Corresponding to ATENBAQ Sub-Dimensions

ATENBAQ	Beliefs and Expectations Towards Evidence-based Nursing X±SS	Evidence-based Practice Intention X±SS	Emotions related to Evidence-based Nursing X±SS	Total Score X±SS
Gender				
Female	28,03±3,85	14,52±2,60	15,94±2,96	58,50±7,80
Male	24,10±7,94	13,57±1,83	16,00±3,78	53,60±11,32
	t=2,784 p:0,007*	t=1,459 p:0,149	t=- 0,068 p:0,946	t=2,024 p:0,047*
Education Status				
High-school	28,63±6,28	16,09±4,30	14,18±3,12	58,90±10,40
Associate's degree	28,55±3,36	16,00±3,43	13,75±3,43	58,30±7,37
Bachelor's degree	28,69±5,93	15,89±2,75	14,56±2,01	56,23±9,46
	F=2,825 p:0,066	F=1,396 p:0,255	F=1,435 p:0,245	F=2,248 p:0,114
Following Results of Scientific Researches				
Yes	29,15±4,45	14,68±2,82	16,78±3,43	60,63±8,72
No	24,37±5,57	13,78±1,80	14,95±2,55	53,12±7,78
	t=3,991 p:0,000*	t=1,556 p:0,902	t=2,475 p:0,015*	t=3,765 p:0,000*
Following an Occupational Journal				
Yes	31,83±3,01	14,91±3,28	17,50±4,18	64,25±8,32
No	25,96±5,38	14,13±2,24	15,43±2,86	55,74±8,57
	t=3,646 p:0,001*	t=1,005 p:0,318	t=1,881 p:0,064	t=3,143 p:0,020*
Following Evidence-based Practices				
Yes	29,34±4,32	14,93±3,01	16,89±3,21	61,17±8,41
No	25,29±5,67	13,80±1,84	15,29±3,01	54,39±8,52
	t=3,232 p:0,002*	t=1,937 p:0,057	t=2,133 p:0,037*	t=3,295 p:0,002*
Receiving Research Methods Education after Graduation				
Yes	29,33±4,87	14,57±3,09	17,04±3,41	60,95±8,51
No	25,95±5,49	14,14±2,13	15,48±2,98	55,59±8,89
	t=2,430 p:0,018*	t=0,670 p:0,505	t=1,915 p:0,060	t=2,338 p:0,022*

*p<0.05

In this research, we have not found any significant difference between gender variable and nurses' mean scores of attitude towards evidence-based practices. (p<0.05). We have detected that attitudes of female nurses towards evidence-based practices are more favorable than that of male nurses. We have found that nurses who follow the evidence-based practices and results of scientific researches have significantly higher (p<0.05) mean scores of attitude towards evidence-based practices, and their mean scores of both emotions and belief & expectations sub-dimensions are also relatively high on a statistically significant

degree. Also, we have detected a significant difference (p<0.05) in the mean scores of attitude towards evidence-based practices and belief & expectations sub-dimension of nurses who follow occupational journals on a regular basis and have received research methods education (Table 2).

DISCUSSION

It is crucial for nursing practices to be evidence-based regarding issues such as improving the quality and consequences of care, making a difference in clinical practices and outcomes of patient care, standardizing the care process, increasing

the nurse and patient satisfaction. Besides, evidence-based practices ensure the scientization of nursing practices. [3,17] In this study which we have carried out to view the attitudes of the nurses who work in the intensive care units of public hospitals towards evidence-based nursing, we have found that the attitude of nurses is on a moderate level ($57,20 \pm 9,06$). In the study in which they have viewed attitudes of nurses towards evidence-based nursing practices Ayhan and colleagues (2015) have determined ATEBNAQ total mean scores ($61,87 \pm 9,44$) of nurses relatively high compared to our study. [16] In other words, given the results above, it is seen that ATEBNAQ total scores of the nurses who have participated in our study are lower than the results of the study mentioned above. We have thought that this difference could arise from the fact that two studies have been carried out with nurses who work in different regions and units.

Scientific research results, which continually renew, bring dynamism into the content and quality of care; one of the ways of conveying these results to nurses is occupational scientific journals. [16] We have detected a significant difference both in scale total scores and belief & expectations sub-dimension scores according to following occupational journals on a regular basis. It can also be seen in the study of Ayhan and colleagues (2015) that mean scores of people who have previously taken a course or read literature related to evidence-based practices is higher than that of the ones who have not encountered with the concept of evidence-based nursing or have only a little knowledge about the subject. [16] Similar to the results of that study we have also found that ATEBNAQ total scores and belief & expectations sub-dimension scores of the nurses who follow evidence-based practices is higher on a significant level than that of the nurses who do not follow evidence-based practices. Besides, we have detected that the attitudes of the nurses who have received research methods education are significantly high.

We think that this result arises from the fact that people draw attention to evidence-based practices in the congresses or panel discussions in which nurses receive research methods education.

We have found the attitudes towards evidence-based nursing of female nurses who have participated in the research to be higher than that of male nurses. We estimate that this result arises from the fact that the number of male nurses that take part in the sample is lower than female nurses, and that the number of male nurses in other studies is lower than this study. [16]

As is in our study, in the studies of both Ayhan et al (2015) and Ruzafa-Martinez et al (2011) it has been found that the education level of the nurses does not affect ATENBAQ total scores and sub-dimension mean scores. [5,16] In a research which has been carried out by Koehn and Lehman, the education level of nurses has been found to affect ATENBAQ total scores, and the authors have indicated that this difference has arisen from the nurses who have Master's degree. The reason for the fact that in our study the education level has not an affect might stem from the fact that nurses who have participated in our research do not have a master's degree. Apart from these, as for the nurses who have participated in our study, we have observed that age and the duration of work in the occupation do not affect their attitudes towards evidence-based nursing. In other studies related to the subject, similar results have been obtained [5,16] So our results support the literature.

CONCLUSION

As a result of this study, we have concluded that attitudes of nurses towards evidence-based nursing practices are partially positive. Besides, since it has been determined that following occupational journal, viewing results of scientific studies, being informed about evidence-based practices and receiving research methods education affects total scale score we recommend an adjustment in the content plans of in-service educations. In the

content of these educations detailed information about following nursing journals and scientific study results on a regular basis should be found. Besides, educations regarding evidence-based practices and research methods should be organized.

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