Original Article

The Relationship between Professional Self-Efficacy Levels of Surgical Nurses and their Attitudes towards Evidence-Based Nursing

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Abstract

Aim: This study was conducted to determine the relationship between the professional self-efficacy levels of surgical nurses and their attitudes towards evidence-based nursing.

Methods: The universe of the study, which was conducted using a descriptive and correlational research design, consisted of nurses (n=180) working in surgical clinics and intensive care units of a university hospital in the Mediterranean region between March and June 2024, and the sample consisted of 162 nurses (88%) who were actively working during the study period and agreed to participate in the research. The data were collected by using the "Personal Information Form", "Nursing Profession Self-Efficacy Scale," and "Attitude Toward Evidence-Based Nursing Scale" after the nurses were informed about the study and their verbal consent was obtained. Descriptive statistics and correlation analysis were used to evaluate the data. Ethics committee approval and institutional permission were obtained to conduct the study.

Results: It was found that the professional self-efficacy levels of surgical nurses were good (mean= 67.4 ± 9.6) and their attitudes towards evidence-based nursing were moderate (mean= 44 ± 5.3). In addition, a statistically low, positive and significant relationship was found between professional self-efficacy levels and attitudes towards evidence-based nursing (r=0.212, p<0.001).

Conclusion: Professional self-efficacy levels of surgical nurses positively affect their attitudes towards evidence-based nursing practices.

Keywords: Surgical nursing, evidence-based nursing, professional self-efficacy.

Introduction

Occupational self-efficacy is self-efficacy in a specific area for the tasks assigned to the profession (Bargsted, 2019; Caruso, 2016). It refers to individuals' beliefs and confidence in their ability to fulfill occupational tasks, challenges and stress. Those with high professional self-efficacy have more motivation to face professional problems (Sun & Li, 2020; Guo, 2017).

Nurses can fulfill the responsibilities expected of them only if they are competent in professional knowledge and skills (Notarnicola et al., 2018; Tiryaki Şen 2019). Therefore, in order to be successful in their profession, nurses should improve their

professional competencies and use the knowledge produced in their daily practice (Fukada, 2018; Guner Kucukkaya, 2010; Arseven, 2016). In order for nurses to take an effective place in the health system of the future, it is necessary to define the professional competencies expected from them and evaluate them at certain intervals. In addition, it is also very important to determine factors affecting the professional competencies of nurses and to conduct studies to improve them (Feliciano, 2019; Nilsson, 2018; Notarnicola, 2018). It is inevitable that surgical nurses who use evidence-based practices, which are recommended to be preferred in order to ensure standardization of care for patients, along with innovation,

and high self-efficacy professionalism attitudes in nursing care, will achieve success in perioperative care (Muhtaroglu, 2023; Mahmoud, 2017; Petre, 2017). There is a general consensus that self-efficacy of professionals is an important determinant of performance. When the perceived selfefficacy of nursing professionals is low, their professional practices may fall below evidence-based practice recommendations (Caruso, 2016). The obstacle defined in front of evidence-based practice is that many clinicians think that they do not have the professional self-efficacy equipped implement in the environment and lack of knowledge on the subject (Chang, 2011; Leal-Costa, 2020).

Those with high professional self-efficacy fulfill their jobs successfully and have high job satisfaction (Bargsted, 2019; Lu, 2020). Therefore, nurses with high self-efficacy not only improve their professional practical skills, but also have the power to improve the quality of care (Caruso, 2016). Increasing evidence-based practices in nurses also supports clinical decision-making and selfefficacy levels. In addition, patient outcomes, nurse autonomy and job satisfaction increase with evidence-based practices (Gandhi, 2018; Boswell, 2020). Today, it is noteworthy that there are a limited number of studies in the literature describing the relationship between the professional self-efficacy levels of surgical nurses and their attitudes towards evidence-based nursing (Muhtaroglu, 2023; Leal-Costa, 2020).

Method

The Statement for Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) was used for reporting the research (Babaoglu, 2021).

Purpose and Type of Research: This descriptive and correlational study was conducted to examine the relationship between surgical nurses' professional self-efficacy levels and their attitudes towards evidence-based nursing.

Population and Sample: The universe of the study consists of 180 nurses working in surgical clinics and intensive care units of a university hospital. The sample of the study consists of 162 nurses who met the criteria and agreed to participate in the study voluntarily during the relevant date range

planned for the study. No sample calculation was made in the study and 88% of the universe was reached.

Inclusion Criteria:

- Volunteering to participate in the study,
- Working as a nurse in a surgical unit for at least 6 months or more.

Data Collection Tools: The data of the study were collected by using the "Patient Descriptive Form", "Nursing Profession Self-Efficacy Scale" and "Scale of Attitude Towards Evidence-Based Nursing".

Personal Information Form: The form, which was created by the researchers in line with the literature, consists of 11 questions questioning the age, gender, education, duration of professional experience, the unit they work in, the duration of working in the profession, the duration of working in the surgical unit, the activities related to post-graduation development and the use of evidence-based practice in patient care (Vicdan, 2019; Muhtaroglu, 2023).

Nursing Profession Self-Efficacy Scale (NPSES): The scale was developed by Caruso et al. to assess the professional selfefficacy of nurses. A Turkish validity and reliability study was conducted by Vicdan and Tastekin in 2017. The questions of the scale, which consists of 16 items and 2 subdimensions in 5-point Likert type, are scored as "5- strongly agree, 4- agree, 3- undecided, 2- disagree, 1- strongly disagree" and all of them are positive. The first sub-dimension of the scale is Quality of Care (items 1-9), and the second sub-dimension is Professional Situations (items 10-16). Kacaroglu Vicdan Tastekin reported the reliability coefficients of the scale as Cronbach alpha=0.82 for the Quality of Care subdimension, Cronbach alpha=0.82 for the Professional Situations sub-dimension and Cronbach alpha=0.87 for the total scale. The higher the score on the scale, the higher the level of professional self-efficacy (Vicdan, 2019). In this study, the reliability coefficients of the scale were found as Cronbach alpha = 0.93 for the Quality of Care sub-dimension, Cronbach alpha = 0.85 for the Professional Situations sub-dimension and Cronbach alpha = 0.93 for the total scale.

Evidence-Based Nursing Attitude Scale (EBNAS): The Scale of Attitudes Toward Evidence-Based Nursing was developed by Ruzafa-Martinez et al. A Turkish validity and

reliability study was conducted by Ayhan and Kocaman in 2013. The scale consists of 15 items and three sub-dimensions. Eight of the items are positive (items 1, 2, 5, 7, 9, 11, 13 and 14) and seven are negative (items 3, 4, 6, 8, 10, 12 and 15). The scale was prepared according to a five-point Likert scale (1=Not at all agree, 2=Disagree, 3=Somewhat agree, 4=Agree, 5=Fully agree). In the Turkish adaptation of the scale, the total score was calculated as Cronbac's α =0.90 (Ayhan, 2013). In the present study, the total score was found to be Cronbach's alpha= 0.62.

Sub-dimensions of the Evidence-Based Nursing Attitude Scale

Beliefs and Expectations about Evidence-Based Nursing Subdimension; includes items related to nurses' beliefs and expectations about the benefits of evidence-based nursing in clinical studies. This subscale includes items 1, 2, 7, 9, 11, 13, 14. In the study, Cronbach's alpha= 0.77 was found in the beliefs and expectations subdimension.

The Evidence-Based Practice Intention Subdimension; includes items related to nurses' behaviors or intentions to implement evidence-based practices, perceived barriers, workload and the use of time allocated for education for evidence-based nursing. This sub-dimension includes items 3, 5, 6, 12. In the study, the intention to practice subdimension was found to be Cronbach's alpha= 0.65.

The Emotions Related to Evidence-Based Nursing Subdimension; includes items related to the level of importance given to evidence-based nursing and the feelings of self-evaluation of the benefits obtained from the realization of evidence-based nursing in clinical practice and the realization of evidence-based nursing in practice. This subdimension includes items 4, 8, 10 and 15 (Ayhan, 2013). In the study, the Emotions sub-dimension was found as Cronbach's alpha= 0.78.

Data Collection: The research data were collected between March and June 2024 from nurses working in surgical clinics (general surgery, ear, nose, nose and throat, urology, plastic and reconstructive surgery, orthopedics, thoracic, cardiovascular and pediatric surgery) and surgical intensive care units (general surgery, neurosurgery, reanimation and anesthesia, cardiovascular

surgery intensive care) of Çukurova University Faculty of Medicine Balcalı Hospital between March and June 2024.. Nurses working in surgical clinics who met the sampling criteria and agreed to participate in the study were met and informed about the purpose of the study. Then, verbal consent was obtained from the nurses and the Patient Identification Form, Nursing Profession Self-Efficacy Scale and Attitude Towards Evidence-Based Nursing Scale were collected by the researcher by face-to-face interview method. The collection process of each questionnaire took approximately 15-20 minutes.

Data Analysis: The data obtained were evaluated using SPSS 22 (Statistical Package of Social Science). Cronbach α coefficients were calculated to estimate the internal consistency of the scales at each time point. In addition to descriptive statistics, Pearson's bivariate correlations were used to analyze the relationship between nurses' self-efficacy and evidence-based practices. Correlation coefficients (rho) were interpreted as 00-0.30 very weak, 0.30-0.50 weak, 0.50-0.70 moderate, 0.70-0.90 strong and 0.90-1.00 very strong correlation (Lafçı, 2022). The results were evaluated at p<0.05 significance

Ethical Dimension: In order to conduct the study, approval from the ethics committee the Çukurova University Faculty of Medicine Research Ethics Committee (Decision no: 142/13 Date: 08/03/2024) and necessary institutional permissions were obtained from the hospital where the study was conducted. The surgical nurses included in the study were informed about the research, the purpose of the research was explained, and their verbal and written consents were obtained. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Results

The mean age of the nurses was 33±7 years, the mean duration of employment was 12±7 years, and the mean duration of employment in the surgical unit was 2±2 years. When examined in terms of gender, 80.9% of the nurses were female, 48.1% had a bachelor's degree, and 79% were working in surgical clinics. It was found that 54.3% of the surgical nurses participated in scientific activities, 30.2% in research, 38.9% in professional

research, 54.3% in evidence-based practice and 35.2% in professional publications (Table 1).

Table 2 examines the sub-dimension and total scale score averages of NPSES and EBNAS. The mean score of the quality of care from the NPSES sub-dimensions was found to be 39.5 ± 5.6 (min=12, max=45), the mean score of the profession dimension was found to be 28 ± 4.4 (min=10, max=35) and the total mean score of the scale was found to be 67.4±9.6 (min=22, max=80), The mean score of EBNAS sub-dimensions for beliefs and expectations was 24.6±3.7 (min=6, max=30), the mean score for implementation intention was 11.3±2.3 (min=7, max=18), the mean score for emotions was 8±3 (min=4, max=19), and the total mean score for the scale was 44±5.3 (min=29, max=61) (Table

A statistically significant relationship was found between engaging in scientific activity and the quality of care, professional situations sub-dimensions and total scale score average (p < 0.05). statistically significant Α relationship was found between participating in the study and the quality of care, professional situations sub-dimensions and total scale score average (p <0.05). A statistically significant relationship was found between professional research and the quality of care and professional situations subdimensions (p<0.05). A statistically significant relationship was found between professional publication and the professional situations sub-dimension and the total score average of the scale (p<0.05). A statistically significant relationship was found between evidence-based practice and the quality of care and professional status sub-dimensions (p<0.05) (Table 3).

It was found that there was a statistically significant relationship between engaging in scientific activity and the belief and emotions sub-dimensions (p<0.05). It was found that was a statistically significant there relationship between participating in the research and the belief and emotions subdimensions (p < 0.05). It was determined that was a statistically significant relationship between doing professional research and the average score of the belief subscale (p<0.05). A statistically significant relationship was found between professional publication and the belief subscale score average (p<0.05). A statistically significant relationship was found between evidencebased practice and belief and emotions subscale score averages (p<0.05) (Table 4).

While there was a statistically significant relationship between the quality of care subdimension of the NPSES scale and the EBNAS beliefs and expectations (r=0.402, p=0.00), implementation intention (r=0.967, p=0.00), and emotions (r=0.272, p=0.00) subdimensions, no significant relationship was found between the total scale score (r=0.143, p=0.06). While a statistically significant relationship was found between the occupational situations sub-dimension of the NPSES scale and the EBNAS beliefs and expectations (r=0.377,p=0.00dimension and the scale total score (r=0.263, p=0.00), no significant relationship was found the implementation between intention (r=0.060, p=0.44) and emotions (r=0.153,p=0.05) sub-dimensions. While a statistically significant relationship was found between the total score of the NPSES scale and the EBNAS beliefs and expectations (r=0.403, p=0.00), emotions (r=0.222, p=0.00) subdimensions and the total score of the scale (r=0.212, p=0.00), no significant relationship was found between the implementation intention sub-dimension (r=0.055, p=0.49) (Table 5).

Table 1. Demographic Data of Surgical Nurses (n=162)

Variables	Mean±SD	Min-Max
Age	33±7	22-55
Length of Professional Experience (years)	12±7	1-37
Length of Experience in Surgical Unit (years)	2 ± 2	1-12
	n	%
Gender		

Female	131	80.9
Male	31	19.1
Education		
High School	73	45.1
Bachelor's Degree	78	48.1
Postgraduate	11	6.8
Working Unit		
Surgical Clinic	128	79
Surgical Intensive Care Unit	34	21
Participation in Scientific Activities		
Yes	88	54.3
No	74	45.7
Participation in Research		
Yes	49	30.2
No	113	69.8
Participation in Professional Research		
Yes	63	38.9
No	99	61.1
Evidence-Based Practice		
Yes	88	54.3
No	74	45.7
Professional Publication		
Yes	57	35.2
No	105	64.8

^{*} Data are expressed as mean, standard deviation=SD.

Table 2. NPSESand EBNAS Scale Scores of Surgical Nurses

Nursing Professional Self-Efficacy Scale (NPSES)	Mean±SD	Min-Max	
Quality of Care	39.5±5.6	12-45	
Professional Practices	28±4.4	10-35	
Total	67.4 ± 9.6	22-80	
Evidence-Based Nursing Attitude Scale (EBNAS)			
Beliefs and Expectations	24.6±3.7	6-30	
Intention to Practice	11.3±2.3	7-18	
Emotions	8±3	4-19	
EBNAS-Total	44±5.3	29-61	

^{*}Data are expressed as mean, standard deviation (SD) and Minimum-Maximum (min-max).

Table 3. Examining the relationship between surgical nurses' NPSESSscores averages and variables

Variables		Quality of Care	Professional Situations	NPSES-Total
		Mean±SD	Mean±SD	Mean±SD
Scientific Activity	Yes (1)	4±1	29±4	69±8
1 22 12 10 10	No (2)	3.6±1	28±5	65±11

	Statistical analysis*	t=2.6, p=0.01*	t=2.7 , p=0.00*	t=2.4, p=0.01*
	Significant Differences	1>2	1>2	1>2
Participation	Yes (1)	4.2±0.6	30±3.4	71±6.4
in Research	No (2)	3.7±1	27±4.4	66±10.3
	Statistical analysis*	t=3.5, p=0.00*	t=4.4 , p=0.00 *	t=3.3, p=0.00 *
	Significant Differences	1>2	1>2	1>2
Participation	Yes (1)	4 ± 0.8	29.4±4	69±7.7
in Professional	No (2)	3.7±1	27.3±4.5	66±10.5
Research	Statistical analysis*	t=2.0, p=0.04 *	t=3.1, p=0.00 *	t=1.8, p=0.08
	Significant Differences	1>2	1>2	1>2
Professional Publication	Yes (1)	3.93±0.9	29.3±4	69.3±7.8
Publication	No (2)	3.76 ± 0.9	27.4±4.5	66.3±10.3
	Statistical analysis*	t=1.1,p=0.26	t=2.6, p=0.00 *	t=1.8, p=0.04*
	Significant Differences	-	1>2	1>2
Evidence Based	Yes (1)	4.1±0.8	29.4±3.5	70.3±6
Application				
	No (2)	4±0.8	26.5±4.9	64.9±11.
	Statistical analysis*	t=2., p=0.04*	t=3.1 , p=0.00 *	t=1.8, p=0.08
	Significant Differences	1>2	1>2	-

^{*}Data are expressed as mean, standard deviation=SD, Min=Minimum, Max=Maximum, t:Independent Sample t Test.

Table 4. Examining the relationship between surgical nurses' NPSES score averages and variables

Variables		Belief	Intention to	Emotions	EBNAS-Total
		Mean±SD	Practice Mean±SD	Mean±SD	Mean±SD
Scientific	Yes (1)	25±3.8	11±2	7.5±2.6	44±4.8
Activity	No (2)	24 ± 3.4	11 ± 2.7	8.7 ± 3.4	44 ± 5.9
	Statistical analysis*	t=2.6, p=0.01 *	t=-0.6, p=0.55	t=-2.6, p=0.00 *	t=-0.4,p=0.70
	Significant Differences	1>2	-	2>1	-
	Yes (1)	26.7 ± 3	11.1±2.3	6.9 ± 2.7	44.5±5.2

Participatio n in	No (2) Statistical	23.7±3.6 t=5.2, p=0.00 *	11.4±2.4 t=-0.8, p=0.42	8.5±3 t=-3.1, p=0.00 *	43.9±5.4 t=0.7,p=0.45
Research	analysis* Significant Differences	1>2	-	2>1	-
Professional Research	Yes (1) No (2)	25.5±3.2 24±3.9	11±2.2 11.5±2.4	7.6±2.6 8.4±3.2	43.9±5 44.2±6
	Statistical analysis* Significant Differences	t=2.6, p=0.01* 1>2	t=-1.1, p=0.25	t=-1.7, p=0.08	t=-0.3,p=0.79
Professional Publication	Yes (1) No (2)	26.2±3 24±3.8	11.2±2.3 11.3±2.4	7.6±2.8 8.3±3.1	45.1±4.7 43.5±5.6
	Statistical analysis*	t=4.2, p=0.00 *	t=-4.2, p=0.64	t=-1.3, p=0.20	t=1.8,p=0.72
	Significant Differences	1>2	-	-	-
Evidence-	Yes (1)	25.9±3.2	11±2	7.3±2.9	44.1±4.7
Based	No (2)	23.1±3.8	11.6±2.6	8.9±2.9	44±4.8
Practice	Statistical analysis*	t=4.8, p=0.00*	t=-1.5, p=0.14	t=-3.4, p=0.00 *	t=1.9,p=0.85
	Significant Differences	1>2	-	2>1	-

^{*}Data are expressed as mean, standard deviation=SD, Min=Minimum, Max=Maximum, t:Independent Sample t Test.

Table 5. The relationship between surgical nurses' EBNAS and NPSES

		EBNAS			
Variables		Beliefs and	Implementation	Emotions	Total
		Expectations	Intention Sub-	Sub-	
		Sub	Dimension	Dimension	
		Dimension			
HMÖYÖ	Quality of	r=0.401	r=0.967	r=-0.272	r=0.143
	Care Subscale	p=0.00**	p=0.00**	p=0.00**	p=0.06
	Professional	r=0.377	r=0.060	r=-0.153	r=0.263
	Situations	p=0.00**	p=0.44	p=0.05	p=0.00**
	Subscale				
	Total	r=0.403	r=0.055	r=-0,222	r=0.212
		p=0.00**	p=0.49	p=0.00**	p=0.00**

^{**}p<0.01, *p<0.05, EBNAS: Evidence-Based Nursing Attitude Scale, NPSES; Nursing Profession Self-Efficacy Scale, r=Pearson Correlation Test.

Discussion

The relationship between the professional self-efficacy levels of surgical nurses and their attitudes towards evidence-based nursing is very important in terms of improving the quality of patient care. Studies show that nurses value evidence-based practice but often lack the necessary competences (Yooder, 2022;). In the last two decades, the literature highlights various

reasons why assessing and promoting self-efficacy is important for various professional groups (Dos, 2020; Keyko, 2016; Silva, 2022, Cziraki, 2022; Kim, 2020). The relationship between the professional self-efficacy levels of surgical nurses and their attitudes towards evidence-based nursing is examined and discussed with the literature in this section.

In this study, it was found that the professional self-efficacy levels of surgical

nurses were good. In a similar thesis study on the subject, it was determined that the professional self-efficacy levels of surgical nurses were good (mean=69.46±10.64) (Muhtaroglu, 2023). There are different studies in the literature showing that the professional self-efficacy levels of nurses are at a good level (Yilmaz, 2018; Genc, 2019; Akdeniz, 2016; Fida, 2016). On the other hand, there are studies reporting that nurses' self-efficacy is at a medium level (Malak Akgun 2015; Dogan, 2015). Nursing selfefficacy is an important aspect of nursing practice that can affect patient outcomes, job satisfaction, stress level and overall performance. Nurses with high self-efficacy tend to have better coping mechanisms, assume leadership roles and provide patientcentred care. To promote self-efficacy in nursing, nurses can participate in continuing education, set achievable goals, seek feedback from colleagues, and work in a positive work culture (Magon, 2023). It is thought that the development of professional self-efficacy can increase the quality of care provided by nurses by increasing their self-confidence. This increase may enable nurses to use their knowledge and skills more effectively and may have positive results in patient care processes.

It is emphasised that the opportunity for professional development nurses of participating in scientific studies meetings related to nursing and opportunity to reflect the new knowledge they have acquired to their practices are factors that increase their professional self-efficacy (Vicdan, 2020). In this study, in parallel with the literature, a statistically significant relationship was found between participation in scientific activities and quality of care, professional conditions sub-dimensions and total scale mean score. A different study revealed a positive relationship between work-life balance, work-life quality, absenteeism and job satisfaction of nurses and emphasised the importance of balancing nursing activities to increase overall job satisfaction and quality (Hassan Helaly, 2022). The overlap of these findings shows that nurses' participation in professional scientific activities is affected by various educational factors such as levels, professional roles and work-life balance. It can be said that these factors make important contributions to the quality of services provided in health care environments and the professional development processes of nurses. In addition, these findings can be interpreted that the current attitudes of nurses may also affect their level of participation in scientific meetings. This suggests that nurses' attitudes towards scientific activities may play a critical role in updating and improving their professional knowledge and skills.

In the field of nursing, there is a lack of studies determine the relationship between professional self-efficacy levels and attitudes toward evidence-based nursing. Similarly, a study on the subject shows that nurses working in surgical departments have positive attitudes towards evidence-based nursing and the effect of the working environment on the perceptions of nurses (Asi Karakas, 2021). Therefore. promoting a supportive environment, providing adequate training, and integrating evidence-based practices into nursing education are vital for nurses to improve their attitudes and competences in evidence-based practices (Yusshy, 2018). It is thought that improvement in professional self-efficacy may contribute to more effective and reliable care processes by synergising with evidence-based attitudes of nurses. In this context, strengthening the professional roles of nurses can be at the centre of strategies promote evidence-based the practices. Increasing professional competences of nurses may improve the quality of health services by facilitating their access to evidence-based knowledge and integrating this knowledge into clinical practices. Therefore. strengthening professional roles can be considered as a critical strategy for the dissemination of evidence-based practices at both individual and institutional levels.

Nurses with high self-efficacy can not only improve their professional nursing practice skills, but also improve the quality of nursing care (Caruso, 2016). In the study, it was found that there was a low, positive and significant relationship between the total score of the Nursing Profession Self-Efficacy Scale and the total score of the Attitude Towards Evidence-Based Nursing Scale. These results are consistent with the findings of different studies in the literature. Similar to the results

obtained, it is stated in the studies that nurses with high self-efficacy levels are more likely to use SWBs during care (Muhtaroglu, 2023; Kristensen, 2015; Atli, 2023; Karakoc-Kumsar, 2020). The results of both this study and other studies show that there is a relationship between the professional selfefficacy levels of nurses and their use of SWUs while providing care to their patients (Muhtaroglu, 2023; Boswell, 2020; Atli, 2023). The findings obtained reveal that improving the professional self-efficacy levels of surgical nurses is critical for them to use evidence-based practices effectively in patient care. These results show that increasing the professional confidence and competence of nurses can support the process of adoption and implementation of EBPs. Therefore, improving the attitudes of surgical nurses towards **CSUs** and their implementation skills can be considered as a priority target within the framework of professional development strategies.

Limitations: This study has several limitations that need to be recognised. The study was conducted only with nursing professionals working in surgical units in a single hospital. A study covering more provinces and hospitals may enrich the results, as well as strengthen or weaken the results obtained.

Conclusions: The findings of the study show that the professional self-efficacy levels of surgical nurses are generally high, and the professional self-efficacy of surgical nurses who take an active role in scientific studies is even higher. In addition, a positive and significant relationship was found between the professional self-efficacy levels of surgical nurses and their attitudes towards evidence-based nursing, albeit at a low level. These findings indicate that professional development of nurses can positively affect their attitudes and behaviors towards evidence-based practices. In line with the results of the study, it is recommended that both individual efforts and institutional support should be increased to strengthen the professional self-efficacy of surgical nurses and their attitudes towards evidence-based nursing. This support may contribute to the more effective use of evidence-based practices in health care by facilitating nurses'

access to scientific knowledge and expanding their professional development opportunities.

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