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Effect of evidence-based nursing practices on individualised care: A cross-sectional descriptive study

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Abstract

Aim: This study was conducted to determine the effect of nurses' attitudes towards evidence-based practices on individualised nursing care.

Methods: This study is a cross-sectional descriptive trial. The descriptive analysis included 200 clinical nurses working in a private hospital between April and September 2022. Data were collected with a personal information form, Individualised Care Scale (A-Nurse Version), and Evidence-Based Nursing Attitude Questionnaire. The relationship between the scales and effect was examined by Pearson correlation and linear regression analyses. *T*-test, one-way analysis of variance (ANOVA), and post hoc (Tukey, LSD) analysis were used in the statistical analysis of nurses according to their descriptive characteristics. This study has adhered to the STROBE checklist for reporting.

Results: They had high mean scores on Individualised Care Scale total (3.68 ± 1.25) and from Clinical Situation (3.78 ± 1.30) and Decisional Control (3.82 ± 1.35) subscales and average score from the Personal Life (3.32 ± 1.29) subscale. Their mean score from the Evidence-Based Nursing Attitude Questionnaire was average (47.64 ± 10.99). There was a positive moderate ($r = 0.50$, $p = 0.000 < 0.05$) significant correlation between the scales.

Conclusion: Positive attitude towards evidence-based nursing practices positively affects individualised care. Variables such as professional experience positively affect nurses' attitudes towards evidence-based nursing. A positive and significant relationship was found between nurses' attitudes towards evidence-based practice and their attitudes towards individualised care.

KEYWORDS

evidence-based practice, individualised care, nurse

1 | INTRODUCTION

Aging populations, chronic conditions, and emerging infectious diseases are major health challenges plaguing healthcare systems globally.[1] A dynamic, versatile and highly skilled nursing workforce is essential to meeting these increasing healthcare demands. Nurses are expected to have critical thinking, effective communication and problem-solving skills to provide holistic, individualised and patient-centred care. Their roles have also expanded beyond the provision of bedside nursing care to keep pace with the rapid changes.[2] As a result, delivery of health care specific to the individual patient and/or community based on evidence-based practices has become an important component of health services.

Evidence-based practice is defined as the integration of the most recent evidence with clinical expertise and client/family preferences and values for optimal health care delivery.[3] Evidence-based practice is known to provide better quality care for the individual/family and society than traditional nursing knowledge-based care.[4,5] It is imperative that every nurse and nursing student develop clinical inquiry skill, which requires the nurse to constantly question whether care is being delivered in the best possible way based on a review of the quality and strength of the evidence.[4] Nursing practice needs to be based on evidence, including research and other forms of evidence. Evidence-based practice is a systematic process that uses available evidence to make decisions about individual/family and community care, including assessment of the quality and feasibility of existing research, individual/family and community preferences, clinical expertise, and available healthcare resources.[6]

Individualised care is defined as nursing care delivery that considers the individual's/patient's clinical situation, personal life and personal characteristics in their preferences, and encourages their participation in care and decision-making.[7] Individualised nursing care can also be described as care designed individually to meet standard nursing procedures and tasks and respect the uniqueness of each individual/patient. The American Nurses Association Code of Ethics requires that nurses must practice "with respect to the innate dignity, worth, uniqueness, and human rights of all individuals".[8]

Research shows that considering the personal characteristics and preferences of patients in nursing care can result in the delivery of more appropriate treatments as well as better perceived quality of care and satisfaction by the patient.[9] Nurses are thus increasingly expected to provide individualised nursing care. Evidence shows that individualised nursing care improves health care quality and patient satisfaction, reduces the rate of readmission, and shortens length of stay.[10,11] As members of an evidence-based profession, nurses should follow evidence-based practices to support their clinical and educational practices. However, there is a gap in the existing literature regarding nurses' attitudes towards evidence-based practices and its relationship with individualised nursing care. Therefore, we aimed to determine the effect of nurses' attitudes towards evidence-based practices on individualised nursing care.

2 | METHODS

2.1 | Study design

This research was designed as a cross-sectional descriptive study.

2.2 | Research questions

- Investigation of factors affecting nurses' attitudes towards evidence-based nursing practices.
- Investigation of factors affecting nurses' individualised patient care.
- Investigating the impact of nurses' evidence-based nursing practice attitudes on individualised patient care.

2.3 | Population and sample

The population of this study covered 500 nurses working in a private hospital in Istanbul between April and September 2022. The sample was determined as 200 people based on the formula used for populations with a known number of individuals. The nurses working in the units where patients are cared for in the hospital were listed by assigning sequence numbers to them, and 200 nurses were selected from this list by using simple random sampling method. In the research, post hoc power analysis was performed in the G*Power program. Evidence-Based Attitude Scale Attitude Questionnaire score average was used in the power analysis. As a result of the calculation, the effect size was determined as 0.75. Accordingly, when the effect size is calculated as 0.75, n:200 and alpha:0.05, the working power is determined as 96%. Since the study sample size is sufficient, the data collection process has been terminated. The flow chart of the study is given in Figure 1.

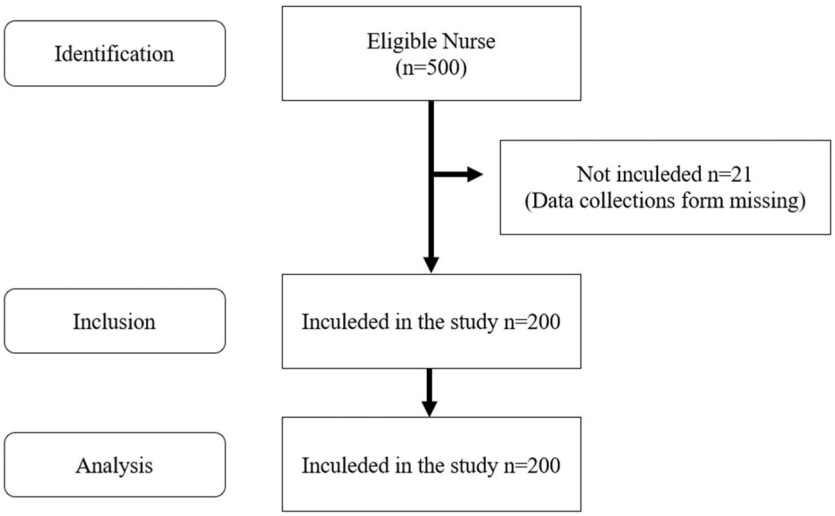
2.4 | Data collection

Data were collected using a Personal Information Form, Individualised Care Scale (A - Nurse Version) (ICS-A), and Evidence-Based Attitudes Attitude Questionnaire (EBNAQ). Face-to-face interviews were conducted to collect data, and each participant took approximately 15 min to complete the survey.

2.4.1 | Personal information form

It contains 14 questions, prepared by researchers based on literature information, and includes nurses' personal information such as age, gender, marital status, number of children, education, and professional information such as the length of time they work in the profession and the hospitals they work in. The questions in the information form were first presented to the opinions of experts in different fields in nursing education. The content validity index obtained from experts is 94%.

FIGURE 1 Flowchart of the study.



2.4.2 | Individualised Care Scale (A Nurse Version)

The ICS-A Nurse version was developed by Suhonen et al. in 2010 to assess nurses' perceptions of individualised care in health care settings.[12] The Turkish validity and reliability study of the scale was conducted by Şendir et al. in 2010. In the first part of the scale, the extent to which nurses generally support the individuality of patients in their care practices (ICS-A), and in the second part, their perceptions of individualising the care of conscious patients they care for in their last shift (ICS-B) are evaluated.[13] ICS-A Nurse version was used in the study. ICS-A Nurse has 3 subscales: Clinical Situation (A01-A07; 7 items), Personal Life (A08-A11; 4 items) and Decision Control (A12-A17; 6 items). ICS-A is a 5-point Likert-type scale consisting of 17 items and is scored as "1=none", "2=some", "3=medium", "4=much", "5=full". The average item score that can be obtained from each item of the scale is at least 1 and at most 5. Higher scores indicate that nurses generally support the individuality of patients more in the care they provide. It takes about 15 min to complete the scale. Cronbach alpha coefficient of the Turkish scale is 0.77 for ICS-A. For this study, the Cronbach alpha reliability coefficient of ICS-A was found as 0.89.

2.4.3 | Evidence-Based Attitude Scale Attitude Questionnaire

It was developed by Ruzafa-Martinez et al.[14] It is a 5-point Likert-type scale and includes 15 questions and three subscales, namely beliefs and expectations towards evidence-based nursing practice, intention to conduct evidence-based practice, and feelings toward evidence-based nursing. A minimum of 15 and a maximum of 75 points can be obtained from the scale. A high score indicates a good attitude towards evidence-based nursing. The total Cronbach alpha reliability coefficient of the evidence-based nursing attitude scale was 0.90. The total Cronbach alpha reliability coefficient of the evidence-based attitude towards nursing scale for this study was found as 0.93.

2.5 | Ethical considerations

Before starting the research, permission was obtained from the ethics committee with the decision numbered 436 dated 25.07.2018. Written permission was obtained from the institution where the research was conducted. After being informed about the research, the nurses who agreed to participate read and signed the consent forms. Permissions for use were obtained for the scales used in the study.

2.6 | Data analysis

The data obtained in the research were evaluated in computer environment through SPSS 22.0 statistical software. Frequency and percentage analyses were used to determine the descriptive characteristics of the nurses participating in the research and mean and standard deviation statistics were used in the analysis of the scale. Kurtosis and skewness values were examined to determine whether the research variables showed a normal distribution (Table 2). The lowest kurtosis value of the research variables was −0.290, and the highest was 2.081. The lowest skewness value was −0.376 and the highest was 0.989. The variables showed normal distribution. Parametric methods were used in the analysis of the data. Relationships between the items determining nurses' scale levels were examined through Pearson correlation and linear regression analyses. *T*-test, one-way analysis of variance (ANOVA), and post hoc (Tukey, LSD) analyses were used to analyse the differences in scale levels according to nurses' descriptive characteristics. Cohen(d) and Eta squared (η^2) coefficients were used to calculate the effect size. The results were evaluated at the 95% confidence interval and the significance level of $p < 0.05$.

3 | RESULTS

Among the nurses who participated in the study, 62.5% were between the ages of 18–25, 76% were female, 77% were single and 84% had no children. 43.5% ($n = 87$) had an associate degree, 53% ($n = 106$) had 1–3 years of professional experience, 24% ($n = 48$) worked in the intensive care unit, 62% ($n = 124$) were responsible of 1–5 patients in a shift (Table 1).

In ICS-A, the nurses had high mean scores from the ICS-A total (3.68 ± 1.25) and from Clinical Situation (3.78 ± 1.30) and Decisional Control (3.82 ± 1.35) subscales and average score from the Personal Life (3.32 ± 1.29) subscale (Table 2). In EBNAQ, their total mean score was 47.64 ± 10.99 and their mean scores from beliefs and expectations towards evidence-based nursing practice, intention to conduct evidence-based practice and feelings toward evidence-based nursing subscales were 27.75 ± 7.62, 11.40 ± 3.33 and 8.48 ± 4.53, respectively (Table 2). Based on the scores of the participants, their attitudes towards evidence-based nursing were at a moderate level.

TABLE 1 Sociodemographic characteristics of nurses ($n = 200$).

Groups	n (%)	Groups	n (%)
Age (years)		Professional experience (years)	
18–25	125 (62.5)	1–3	106 (53.0)
26–35	58 (29.0)	4–10	61 (30.5)
36–50	17 (8.5)	>10	33 (16.5)
Gender		Unit of work	
Male	48 (24.0)	Emergency	25 (12.5)
Female	152 (76.0)	Operating room	45 (22.5)
Marital status		Paediatric	17 (8.5)
Married	46 (23.0)	Cardiovascular surgery intensive care	19 (9.5)
Single	154 (77.0)	Oncology	14 (7.0)
Has children?		Intensive Care Unit	48 (24.0)
No	168 (84.0)	Other	32 (16.0)
Yes	32 (16.0)	Number of patients cared for per shift	
Education		None	40 (20.0)
Health vocational high school	37 (18.5)	1–5	124 (62.0)
Bachelor's degree	76 (38.0)	>5	36 (18.0)
Associate degree	87 (43.5)	Satisfaction with the work environment	
Choose nursing willingly?		Satisfied	111 (55.5)
Yes	184 (92.0)	Partly satisfied	79 (39.5)
No	16 (8.0)	Not satisfied	10 (5.0)

Based on the analyzes carried out to determine the correlation between the nurses' ICS-A and EBNAQ scores, there was a positive moderate correlation between total EBNAQ and ICS-A total ($r = 0.50$, $p = 0.000 < 0.05$), a positive moderate correlation between EBNAQ total and ICS-A Clinical Situation ($r = 0.5$, $p = 0.000 < 0.05$), a positive weak correlation ($r = 0.43$, $p = 0.000 < 0.05$) between the total EBNAQ and the ICS-A Personal Life and a positive weak correlation ($r = 0.48$, $p = 0.000 < 0.05$) between the total EBNAQ and the ICS-A Decisional Control subscales. The correlation analysis between the subscales of EBNAQ and ICS-A demonstrated a positive moderate correlation between ICS-A total and beliefs and expectations towards evidence-based nursing practice ($r = 0.63$, $p = 0.000 < 0.05$), a positive moderate correlation with Clinical Situation ($r = 0.64$, $p = 0.000 < 0.05$), a positive moderate correlation with Personal Life ($r = 0.53$, $p = 0.000 < 0.05$) and a positive moderate correlation with Decisional Control ($r = 0.61$, $p = 0.000 < 0.05$) subscales. There was a positive very weak correlation between intention to conduct evidence-based practice and ICS-A total ($r = 0.24$, $p = 0.000 < 0.05$), a positive weak correlation with Clinical Situation ($r = 0.25$, $p = 0.000 < 0.05$), positive very weak correlation with Personal Life ($r = 0.19$, $p = 0.005 < 0.05$) and a positive very weak correlation with Decisional Control ($r = 0.24$, $p = 0.001 < 0.05$) subscales (Table 3).

The regression analysis performed to determine the cause-and-effect relationship between the total mean score of EBNAQ and the overall mean score of ICS-A demonstrated a significant relationship ($F = 66.39$; $p = 0.000 < 0.05$). 24.7% of the total change in ICS-A total mean score is explained by the total score of EBNAQ ($R^2 = 0.247$). Attitude towards evidence-based nursing increases the overall ICS-A level ($ß = 0.501$) (Table 4). The regression analysis performed to determine the cause-and-effect relationship between the subscales of EBNAQ and ICS-A total mean score also demonstrated a significant relationship ($F = 45.24$; $p = 0.000 < 0.05$). Beliefs and expectations towards evidence-based nursing subscale increase the ICS-A average score ($ß = 0.643$) (Table 4).

When the distribution of ICS-A and EBNAQ scores according to the sociodemographic characteristics of the nurses was analysed, the Clinical Situation ($x = 3.435$) and beliefs and expectations towards evidence-based nursing practice ($x = 25.250$) scores of men were found to be lower than the scores of women ($x = 3.892$; $x = 28.546$) ($p = 0.033 < 0.05$; $p = 0.009 < 0.05$, respectively). Feelings toward evidence-based nursing scores of men ($x = 10.417$) were higher than women's scores ($x = 7.875$) ($p = 0.003 < 0.05$) (Table 5).

Married people's ICS-A Nurse total ($x = 4.072$) and subscale scores ($x = 4.202$; $x = 3.669$; $x = 4.188$) and beliefs and expectations towards evidence-based nursing practice scores ($x = 29.609$) were found to be higher than the scores of singles ($p = 0.006 < 0.05$; $p = 0.032 < 0.05$) (Table 5).

ICS-A Nurse total ($x = 3604$) and subscale scores and beliefs and expectations towards evidence-based nursing practice scores ($x = 27.220$) of the participants without children were lower than those of those who had children ($p = 0.014 < 0.05$; $p = 0.023 < 0.05$) (Table 5).

TABLE 2 Mean ICS-A and EBNAQ scores (n = 200).

Subscale	Mean ± SD	Min	Max	Kurtosis	Skewness	Alpha
ICS-A overall	3.68 ± 1.25	1.00	5.00	−0.43	−0.93	0.98
Clinical situation	3.78 ± 1.30	1.00	5.00	−0.29	−1.04	0.96
Personal life	3.32 ± 1.29	1.00	5.00	−1.12	−0.37	0.92
Decisional control	3.82 ± 1.35	1.00	5.00	−0.31	−1.05	0.96
EBNAQ total	47.64 ± 10.99	15.00	75.00	2.08	−0.42	0.86
Beliefs and expectations towards evidence-based nursing practice	27.75 ± 7.62	7.00	35.00	1.03	−1.27	0.95
Intention to conduct evidence-based practice	11.40 ± 3.33	4.00	20.00	0.19	0.37	0.57
Feelings toward evidence-based nursing	8.48 ± 4.53	4.00	20.00	0.16	0.98	0.89

Abbreviations: EBNAQ, Evidence-Based Attitudes Attitude Questionnaire; ICS-A, Individualised Care Scale (A - Nurse Version).

TABLE 3 Correlation levels between ICS-A and EBNAQ scores.

	ICS-A total	Clinical situation	Persona life	Decisional control
EBNAQ total	0.50*	0.50*	0.43*	0.48*
Beliefs and expectations towards evidence-based nursing practice	0.63*	0.64*	0.53*	0.61*
Intention to conduct evidence-based practice	0.24*	0.25*	0.19*	0.24*
Feelings toward evidence-based nursing	−0.04	−0.06	0.01	−0.04

Abbreviations: EBNAQ, Evidence-Based Attitudes Attitude Questionnaire; ICS-A, Individualised Care Scale (A - Nurse Version).
*<0.01; Pearson correlation analysis.

TABLE 4 The effects of the total and sub-dimensional scores of ebnaq on the ICS-A overall score average.

Dependent variable	Independent variable	ß	t	p	F	Model (p)	R^2	%95 confidence interval	
								Lower	Upper
ICS-A general	Constant	0.955	2.774	0.006	66.396	0.000	0.247	0.27	1.63
	EBNAQ total	0.501	8.148	0.000				0.04	0.07
ICS-A general	Constant	0.670	2.162	0.032	45.241	0.000	0.400	0.05	1.28
	Beliefs and expectations towards evidence-based nursing practice	0.643	9.285	0.000	-	-	-	0.08	0.12
	Intention to conduct evidence-based practice	0.000	−0.002	0.998	-	-	-	−0.07	0.07
	Feelings toward evidence-based nursing	0.032	0.350	0.727	-	-		−0.04	0.05

Note: Linear regression analysis.
Abbreviation: ICS-A, Individualised Care Scale (A - Nurse Version).

ICS-A Nurse total and subscale scores, and beliefs and expectations towards evidence-based nursing practice scores of nurses with bachelor's degree were found to be higher than the scores of nurses with associate degree and health vocational high school degree (p = 0.004 < 0.05; p = 0.016 < 0.05) (Table 5).

The beliefs and expectations towards evidence-based nursing practice scores of those with more than 10 years of professional experience were higher than the scores of those with 4–10 years of professional experience (p < 0.05) (Table 5).

TABLE 5 Distribution of ICS-A and EBNAQ scores by sociodemographic characteristics of nurses

Demographics	ICS-A Total Mean ± SD	Clinical situation Mean ± SD	Personal life Mean ± SD	Decisional control Mean ± SD	EBNAQ Total Mean ± SD	Beliefs and expectations towards evidence-based nursing practice Mean ± SD	Intention to conduct evidence-based practice Mean ± SD	Feelings toward evidence-based nursing Mean ± SD
Age								
18–25 years	3.600 ± 1.293	3.675 ± 1.352	3.224 ± 1.293	3.761 ± 1.397	47.744 ± 11.172	27.504 ± 7.588	11.512 ± 3.414	8.728 ± 4.559
26–35 years	3.751 ± 1.209	3.879 ± 1.214	3.427 ± 1.257	3.816 ± 1.321	46.897 ± 11.679	27.069 ± 8.293	11.345 ± 3.317	8.483 ± 4.593
36–50 years	4.132 ± 1.118	4.235 ± 1.115	3.750 ± 1.355	4.265 ± 1.149	49.471 ± 6.681	31.941 ± 3.288	10.824 ± 2.856	6.706 ± 3.965
	$F = 1.442$ $p = 0.239$	$F = 1.627$ $p = 0.199$	$F = 1.491$ $p = 0.228$	$F = 1.030$ $p = 0.359$	$F = 0.371$ $p = 0.690$	$F = 2.921$ $p = 0.056$	$F = 0.330$ $p = 0.719$	$F = 1.495$ $p = 0.227$
Gender								
Male	3.386 ± 1.266	3.435 ± 1.360	3.073 ± 1.237	3.538 ± 1.368	47.688 ± 13.665	25.250 ± 8.138	12.021 ± 3.900	10.417 ± 5.127
Female	3.784 ± 1.245	3.892 ± 1.265	3.408 ± 1.301	3.909 ± 1.346	47.632 ± 10.059	28.546 ± 7.304	11.211 ± 3.121	7.875 ± 4.166
	$t = -1.923$ $p = 0.056$	$t = -2.145$ **$p = 0.033$**	$t = -1.573$ $p = 0.117$	$t = -1.657$ $p = 0.099$	$t = 0.031$ $p = 0.976$	$t = -2.651$ **$p = 0.009$**	$t = 1.473$ $p = 0.142$	$t = 3.479$ **$p = 0.003$**
Marital status								
Married	4.072 ± 0.966	4.202 ± 0.956	3.669 ± 1.124	4.188 ± 1.054	49.022 ± 9.015	29.609 ± 6.119	11.326 ± 2.860	8.087 ± 4.371
Single	3.574 ± 1.315	3.657 ± 1.364	3.226 ± 1.323	3.710 ± 1.420	47.234 ± 11.515	27.201 ± 7.952	11.429 ± 3.469	8.604 ± 4.590
	$t = 2.379$ **$p = 0.006$**	$t = 2.529$ **$p = 0.003$**	$t = 2.058$ **$p = 0.027$**	$t = 2.116$ **$p = 0.015$**	$t = 0.968$ $p = 0.334$	$t = 1.892$ **$p = 0.032$**	$t = -0.183$ $p = 0.855$	$t = -0.678$ $p = 0.499$
Has children?								
No	3.604 ± 1.284	3.691 ± 1.336	3.238 ± 1.283	3.747 ± 1.390	47.363 ± 11.202	27.220 ± 7.836	11.488 ± 3.341	8.655 ± 4.520
Yes	4.131 ± 1.029	4.259 ± 0.977	3.797 ± 1.247	4.203 ± 1.108	49.125 ± 9.866	30.563 ± 5.708	10.969 ± 3.307	7.594 ± 4.578
	$t = -2.188$ **$p = 0.014$**	$t = -2.288$ **$p = 0.007$**	$t = -2.267$ **$p = 0.024$**	$t = -1.751$ **$p = 0.046$**	$t = -0.830$ $p = 0.407$	$t = -2.297$ **$p = 0.023$**	$t = 0.807$ $p = 0.420$	$t = 1.215$ $p = 0.226$
Education								
Health vocational high school	3.364 ± 1.468	3.479 ± 1.475	3.041 ± 1.433	3.446 ± 1.589	47.054 ± 10.957	26.568 ± 8.348	11.432 ± 2.844	9.054 ± 4.062
Bachelor's degree	3.502 ± 1.209	3.604 ± 1.316	3.081 ± 1.185	3.665 ± 1.316	47.000 ± 10.987	26.540 ± 7.594	11.759 ± 3.306	8.701 ± 4.380
Associate degree	4.060 ± 1.123	4.134 ± 1.116	3.750 ± 1.239	4.180 ± 1.208	48.671 ± 11.089	29.724 ± 6.949	10.987 ± 3.568	7.961 ± 4.914
	$F = 5.743$ **$p = 0.004$**	$F = 4.773$ **$p = 0.009$**	$F = 6.971$ **$p = 0.001$**	$F = 4.824$ **$p = 0.009$**	$F = 0.532$ $p = 0.589$	$F = 4.220$ **$p = 0.016$**	$F = 1.090$ $p = 0.338$	$F = 0.898$ $p = 0.409$
Post hoc=	3 > 1. 3 > 2	3 > 1. 3 > 2	3 > 1. 3 > 2	3 > 1. 3 > 2		3 > 1. 3 > 2		

TABLE 5 (Continued)

Demographics	ICS-A Total Mean ± SD	Clinical situation Mean ± SD	Personal life Mean ± SD	Decisional control Mean ± SD	EBNAQ Total Mean ± SD	Beliefs and expectations towards evidence-based nursing practice Mean ± SD	Intention to conduct evidence-based practice Mean ± SD	Feelings toward evidence-based nursing Mean ± SD
Professional experience (years)								
1–3 years	3.640 ± 1.258	3.735 ± 1.321	3.222 ± 1.306	3.810 ± 1.362	48.094 ± 11.133	27.925 ± 7.266	11.509 ± 3.468	8.660 ± 4.674
4–10 years	3.589 ± 1.342	3.682 ± 1.377	3.287 ± 1.275	3.683 ± 1.443	46.279 ± 12.531	26.115 ± 8.788	11.393 ± 3.527	8.771 ± 4.562
>10 years	4.027 ± 1.068	4.121 ± 1.041	3.742 ± 1.227	4.106 ± 1.160	48.727 ± 6.719	30.242 ± 5.635	11.091 ± 2.479	7.394 ± 3.960
	$F = 1.465$ $p = 0.234$	$F = 1.382$ $p = 0.253$	$F = 2.114$ $p = 0.123$	$F = 1.047$ $p = 0.353$	$F = 0.717$ $p = 0.489$	$F = 3.268$ **$p = 0.040$**	$F = 0.197$ $p = 0.821$	$F = 1.157$ $p = 0.316$
Unit of work								
Operating room	3.373 ± 1.305	3.540 ± 1.437	2.894 ± 1.274	3.496 ± 1.383	48.800 ± 7.921	26.640 ± 5.361	12.280 ± 2.821	9.880 ± 4.558
Paediatric	3.734 ± 1.272	3.765 ± 1.429	3.353 ± 1.199	3.951 ± 1.301	45.867 ± 13.218	26.467 ± 8.693	11.089 ± 3.528	8.311 ± 4.410
Cardiovascular surgery intensive care	4.025 ± 1.248	4.120 ± 1.303	3.618 ± 1.209	4.184 ± 1.319	45.000 ± 11.175	26.647 ± 8.100	10.412 ± 3.203	7.941 ± 3.929
Oncology	3.727 ± 1.339	3.745 ± 1.465	3.304 ± 1.309	3.988 ± 1.413	49.684 ± 12.481	30.368 ± 7.566	11.632 ± 3.670	7.684 ± 4.655
Intensive care unit	3.610 ± 1.375	3.699 ± 1.329	3.354 ± 1.422	3.677 ± 1.530	51.714 ± 6.120	30.000 ± 4.472	13.000 ± 2.987	8.714 ± 4.811
Other	4.336 ± 0.787	4.388 ± 0.800	4.094 ± 0.991	4.438 ± 0.842	45.958 ± 11.998	26.875 ± 8.442	10.771 ± 3.459	8.313 ± 4.723
	$F = 2.744$ **$p = 0.014$**	$F = 2.147$ **$p = 0.050$**	$F = 3.745$ **$p = 0.002$**	$F = 2.352$ **$p = 0.032$**	$F = 1.321$ $p = 0.250$	$F = 1.452$ $p = 0.197$	$F = 1.550$ $p = 0.164$	$F = 0.556$ $p = 0.765$
Worked in the current unit								
<1 year	3.497 ± 1.450	3.558 ± 1.518	3.283 ± 1.400	3.569 ± 1.541	46.688 ± 11.455	27.662 ± 8.076	11.013 ± 3.519	8.013 ± 4.558
1–3 years	3.686 ± 1.120	3.802 ± 1.160	3.141 ± 1.208	3.915 ± 1.224	49.150 ± 10.852	27.538 ± 7.015	11.988 ± 3.220	9.625 ± 4.662
>4 years	4.036 ± 1.075	4.146 ± 1.036	3.756 ± 1.162	4.093 ± 1.186	46.558 ± 10.324	28.326 ± 8.020	11.023 ± 3.105	7.209 ± 3.796
	$F = 2.562$ $p = 0.080$	$F = 2.890$ $p = 0.058$	$F = 3.328$ **$p = 0.038$**	$F = 2.412$ $p = 0.092$	$F = 1.254$ $p = 0.288$	$F = 0.157$ $p = 0.855$	$F = 2.058$ $p = 0.130$	$F = 4.825$ **$p = 0.009$**
Post hoc=		3 > 2				2 > 1. 2 > 3		

(Continues)

TABLE 5 (Continued)

Demographics	ICS-A Total Mean ± SD	Clinical situation Mean ± SD	Personal life Mean ± SD	Decisional control Mean ± SD	EBNAQ Total Mean ± SD	Beliefs and expectations towards evidence-based nursing practice Mean ± SD	Intention to conduct evidence-based practice Mean ± SD	Feelings toward evidence-based nursing Mean ± SD
Number of patients cared for per shift								
None	3.835 ± 1.158	3.939 ± 1.174	3.488 ± 1.296	3.946 ± 1.257	45.725 ± 10.863	27.500 ± 8.262	10.750 ± 2.907	7.475 ± 3.863
1–5	3.675 ± 1.292	3.766 ± 1.333	3.302 ± 1.288	3.817 ± 1.408	47.718 ± 11.178	27.815 ± 7.660	11.411 ± 3.457	8.492 ± 4.527
>5	3.572 ± 1.268	3.663 ± 1.334	3.236 ± 1.316	3.690 ± 1.307	49.528 ± 10.432	27.833 ± 6.934	12.111 ± 3.276	9.583 ± 5.084
	$F = 0.431$ $p = 0.650$	$F = 0.451$ $p = 0.637$	$F = 0.418$ $p = 0.659$	$F = 0.336$ $p = 0.715$	$F = 1.142$ $p = 0.321$	$F = 0.028$ $p = 0.973$	$F = 1.590$ $p = 0.206$	$F = 2.070$ $p = 0.129$
Choose nursing willingly?								
Yes	3.712 ± 1.216	3.811 ± 1.258	3.334 ± 1.263	3.850 ± 1.318	47.734 ± 10.736	27.826 ± 7.450	11.440 ± 3.309	8.467 ± 4.517
No	3.415 ± 1.699	3.455 ± 1.726	3.250 ± 1.628	3.479 ± 1.760	46.625 ± 14.009	26.938 ± 9.650	11.000 ± 3.688	8.688 ± 4.882
	$t = 0.904$ $p = 0.504$	$t = 1.049$ $p = 0.432$	$t = 0.250$ $p = 0.843$	$t = 1.048$ $p = 0.423$	$t = 0.386$ $p = 0.700$	$t = 0.446$ $p = 0.656$	$t = 0.506$ $p = 0.614$	$t = -0.186$ $p = 0.853$
Satisfaction with the work environment								
Satisfied	3.803 ± 1.253	3.901 ± 1.287	3.466 ± 1.275	3.913 ± 1.338	48.505 ± 11.719	28.622 ± 7.607	11.423 ± 3.594	8.460 ± 4.792
Partly satisfied	3.602 ± 1.210	3.694 ± 1.265	3.193 ± 1.273	3.766 ± 1.333	46.342 ± 9.575	26.886 ± 7.555	11.266 ± 2.908	8.190 ± 4.007
Not satisfied	3.106 ± 1.601	3.157 ± 1.603	2.850 ± 1.506	3.217 ± 1.702	48.400 ± 13.235	25.000 ± 7.659	12.300 ± 3.653	11.100 ± 5.152
	$F = 1.730$ $p = 0.180$	$F = 1.814$ $p = 0.166$	$F = 1.767$ $p = 0.174$	$F = 1.315$ $p = 0.271$	$F = 0.917$ $p = 0.401$	$F = 1.900$ $p = 0.152$	$F = 0.429$ $p = 0.652$	$F = 1.847$ $p = 0.160$

Note: *F*: ANOVA test; *t*: Independent groups test; post hoc: Tukey, LSD.

Abbreviations: EBNAQ, Evidence-Based Attitudes Attitude Questionnaire; ICS-A, Individualised Care Scale (A - Nurse Version).

ICS-A Nurse total and subscale scores and EBNAQ total and subscale scores of the nurses working in the emergency department were found to be lower than the nurses working in other units. The total and sub-dimension scores of the nurses' ICS-A and EBNAQ do not differ significantly according to age, the number of patients cared for in shifts, their willingness to choose the profession and their satisfaction with the working environment ($p > 0.05$) (Table 5).

4 | DISCUSSION

Individualised care is the integration of the faith in human uniqueness and integrity, the foundation of nursing philosophy and values, with care practices. Individualised care is part of the nursing practice. Nurses are in constant and close communication with patients and have an important power in the delivery of individualised care with a humanistic and holistic perspective.[7]

The majority of the nurses participating in our study were female, single and did not have children, and had a mean age of 18–25 years. Most of them had an associate degree, professional experience of 1–3 years, worked in intensive care units and were responsible for 1–5 patients in a shift. They chose the profession willingly and were satisfied with the working environment. Findings related to socio-demographic characteristics obtained in this study were found to be consistent with the literature.[5,9]

Nurses had high mean scores from the ICS-A Nurse total (3.68 ± 1.25) and from clinical situation (3.78 ± 1.30) and Decisional Control (3.82 ± 1.35) subscales and average score from the personal life (3.32 ± 1.29) subscale. The nurses in our study had a good level of ICS-A Nurse total score. Can and Acaroglu also found good ICS-A Nurse total mean scores for nurses working in intensive care, surgery and internal medicine clinics with the highest and lowest subscale scores being from the Clinical Situation and Personal Life, respectively.[13] In the study by Erol Ursavas et al.,[15] nurses' ICS-A Nurse total mean score was found to be good at 3.72 ± 0.80, with subscale mean scores reported as 3.96 ± 0.82 for Clinical Situation, 3.82 ± 0.89 for Decisional Control and 3.24 ± 1.11 for Personal Life, from highest to lowest, respectively.[15] Our study supported these findings in the literature. This finding of the study shows that nurses cared that patients should have a say in their own care. It was concluded that the nurses respected how the individual reacts to or perceives the disease while they provided care and they also believed that patients should have a say in decisions about care. In the study, it was determined that ICS-A scores of nurses who were married and had children were significantly higher. It is known that individuals who are married and have children have more responsibility than single individuals because they assume the role of parent and spouse in the family. It is thought that especially those with children may be more conscious about care because they are responsible for primary care. In this context, ICS-A scores were thought to be higher.

In our study, nurses' attitudes towards evidence-based nursing were moderate. In the study nurses' attitudes towards evidence-based nursing were average according to the attitude scale towards evidence-based nursing and low compared to the subscales.[16] The mean EBNAQ score in this study is similar to those reported by Ruzafa-Martinez et al.[14] with nurses in Spain, Dikmen et al.[17] with nurses in Turkey, and Kucukoglu et al.[18] with nurses in Turkey.[14,17,18] We think that education level, having professional experience, choosing the profession willingly and being satisfied with the working environment may have increased the evidence-based attitude mean score.

In our study, a moderately significant positive correlation was found between the nurses' EBNAQ total and ICS-A Nurse total scores. The attitude towards evidence-based nursing increased the overall ICS-A level. This finding indicates a positive and significant relationship between nurses' attitudes towards evidence-based practice and their attitudes towards individualised care. Individualised care is an element of nursing care that considers patients' individual characteristics, personal lifestyle, preferences regarding their clinical condition, and their participation in the decision-making process that may affect their own care.[19] While giving care to the patient, the nurse should benefit from evidence-based practices, seek the best available and up-to-date evidence, and provide individualised care by considering the needs and preferences of the patient while evaluating the patient with their clinical expertise. To achieve excellence in the healthcare system, it is important to provide quality care in terms of biological, psychological and social aspects on the basis of accurate, important and applicable evidence, to encourage nurses to work with evidence-based information, to solve problems in the clinical field, to introduce innovation to practices, to reduce differences in nursing care, to make effective decisions and minimise practice errors.[6] Hence, nurses' attitude and knowledge towards evidence-based nursing will be very important when giving individualised care to the patient. We believe the fact that the nurses in our study were experienced, chose the profession willingly, and were satisfied with the working environment affected their attitudes towards evidence-based nursing during individualised care given to patients. In addition, in our study, it was determined that the EBNAQ scores of nurses who were married and had children were significantly higher. As we mentioned in the previous paragraph, it is thought that this situation may be due to the fact that individuals who are married and have children carry more responsibility than single individuals because they assume the role of parent and spouse in the family.

Nurses' ICS-A total and subscale scores did not differ significantly by age, the number of patients cared for in a shift, their willingness to choose the profession and their satisfaction with the working environment. In our study, women's clinical situation scores were higher, and those who were married, had children, and had a bachelor's degree had higher overall subscale scores. ICS-A total and subscale scores of nurses working in the emergency department were lower than those working in other units. Age groups in the studies by Suhonen et al.[12] and Idvall et al.[20] did not differ in their perceptions of individualised care, whereas nurses in the higher age group had a higher perception of individualised care in the study by Er Korucu (2021).[12,20,21] In Idvall et al. study (2012),

the working hours of nurses did not affect their perception of individualised care.[20] In the study by Suhonen et al. (2012), there was a significant difference in the perception of individualised care of married nurses.[20] We think that this is due to the different sample groups in the studies. In the study conducted by Idvall (2012), the participants who had children perceived their working environment more positively than the other participants. Both favourable legislation and empathetic approaches of colleagues towards nurses with children offering them easier conditions for shifts and overtime work, especially in institutions with sufficient staffing, may be the reason why these nurses were more satisfied with the working environment.[20] In the study by Er Korucu et al.,[21] perceptions of individualised care became better as the level of education increased.[21] Increasing the level of education may lead to an increase in the perception of individualised care of patients and nurses by allowing the latter to provide better quality care to patients.

Nurses' EBNAQ total and subscale scores did not differ significantly by age, number of patients cared for in a shift, willingness to choose the profession, and satisfaction with the working environment. Women's beliefs and expectations towards evidence-based nursing scores were higher, men's feelings toward evidence-based nursing scores were higher, those who were married had higher overall subscale scores, those who had children, those with high school degree, and those with more than 10 years of professional experience had higher beliefs and expectations towards evidence-based nursing scores. Nurses working in the emergency department had lower EBNAQ total and subscale scores than the nurses working in other units. There are studies in the literature examining the attitudes of nurses towards evidence-based nursing.[22,23] Similar results were also reported in some of these studies.[14,17,22] The high number of younger and female nurses in our study, the fact that they had professional experience and the number of nurses working in units where critical patient care is required such as intensive care and oncology is thought to have affected the results of the study.

5 | LIMITATIONS AND STRENGTHS OF THE STUDY

The strengths of the study are that the nurses were assigned using a simple random sampling method from a list of given sequence numbers, expert opinions were obtained for data collection forms, and a suitable environment that will prevent nurses from being influenced by each other was provided during data collection. Collecting the data from a single centre and the small population/sample were the limitations of the study.

6 | CONCLUSION

As a result of this study, it was determined that attitudes towards evidence-based nursing practices had a positive effect on individualised care, and characteristics such as professional experience positively affected nurses' attitudes towards evidence-based nursing. A positive and significant relationship was found between nurses' attitudes towards evidence-based practice and their attitudes towards individualised care.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

This study was approved by the Istanbul Medipol University Non-Interventional Research Ethics Committee No: 436.

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