

Professional Values, Clinical Decision-Making, and Organizational Commitment among Nurses: Analytic Cross-Sectional Study

* Nadia Mohamed El-Sayed Ghonem. ** Hanaa Mohamed Abdrabou.

* Nursing Administration, Faculty of Nursing,- Suez- Canal University.

** Nursing Administration, Faculty of Nursing,- Ain Shams University.

Abstract

Background: Professional values reflect an individual's belief and loyalty to his/her profession. It has a positive impact on nurses' practice of patient care. **Aim of study:** to assess professional values among nurses at Suez-Canal University Hospitals, and to examine its relationships with their decision-making and organizational commitment. **Subjects and methods:** This analytic cross-sectional study was carried out at Suez Canal University Hospitals. A purposive sampling technique was used (171 nurses). A self-administered questionnaire with scales for nursing Professional Values, Clinical Decision-Making in Nursing and Organizational Commitment was used in collecting data. The fieldwork was from March to May 2019. **Results:** Nurses' age 21-55 years, and 91.8% were females. In total, the mean values out of a maximum of 5 for professional values was 3.47, 2.64 for decision-making, and 3.85 for organizational commitment. The scores of professional values and clinical decision-making had a strong positive significant correlation ($r=0.865$). In multivariate analysis, the professional values score was a positive predictor of the decision-making score. **Conclusions:** The nurses in the study settings have high professional values and organizational commitment, with lower clinical decision-making skills. Professional values is a positive predictor of decision-making. **Recommendations:** It is recommended that hospital administration enhances nurses' abilities in decision-making through staff development programs. A study of the effect of professional values on nurse and patient outcomes is proposed.

Keywords: Professional Values, Clinical Decision-Making, Organizational Commitment

Introduction

Professional values reflect an individual's belief and loyalty to his/her profession as a member of it. These encompass morals as activism, trust, caring, and justice, and are related to one's personal values and is a source of motivation and devotion at work (Fernández-Feito et al., 2019). Professional values are of great importance in nursing given the numerous ethical aspects related to this profession such as the violation of patient rights, and the conflicts between policies and quality

patient care (Ibrahim and Qalawa, 2016; Kaya et al., 2016). Hence, the process of professional values learning spans throughout nurses' career trajectory from study to work (Poorchangizi et al, 2019).

The application of professional values by nurses in their practice is associated with better quality of patient care. They have a positive impact on nurses' judgment and choices in their care for patients, and their decisions and actions, with compliance to standards (Al Shammari et al., 2017; Stainton and

Hughson 2017). Professional values also help nurses to identify resolutions for ethical problems when making decisions (**Donmez Ozsoy, 2016**).

Clinical decision-making is an essential skill for nurses. Decisions could be intuitive and quick or analytic based on evidence (**Aktaş and Karabulut, 2017**). The process of decision-making consists goes through steps involving collection of information about the situation, revision of potential solutions, and consequently making the decision (**Pourama et al., 2015**). The decision should be taken in the light of the nursing professional values, and taking into consideration the after-effects of such decision and related nurse accountability (**Rubio-Navarro et al., 2020**).

High professional values would also increase job satisfaction among nurses, and improve their organizational commitment, with better retention rates (**Dehghani et al., 2015; Parandeh1et al., 2015**). Moreover, nurse have to comply with professional values in their practice in order to show their commitment (**Bijani et al., 2019**), since organizational commitment can be viewed as the trust in and assent of the values of one's chosen profession, the struggle to realize these values, and the aspiration to improve self (**Ayaz-Alkaya et al., 2018**).

Significance of the study

Professional values are a cornerstone in nursing practice. They constitute the base upon which decision-making is built. Additionally, they might affect nurses' organizational commitment. Nonetheless, there is a paucity of nursing research examining the inter-relations among professional values, clinical decision-making, and organization commitment. This study is

an attempt to clarify these relationships, and fill the related knowledge gap.

Aim of the study

The aim of this study was to assess professional values among nurses at Suez-Canal University Hospitals, and to examine its relationships with their clinical decision-making and organizational commitment. The research hypothesis was that all three parameters are positively correlated.

Subjects and Methods

The subjects and methods of this study were portrayed under four main domains as the following:

- I. Technical design
- II. Operational design
- III. Administrative design
- IV. Statistical design.

Technical design

It includes the research design, study setting, subjects and tools for data collection.

Research design: An analytic cross-sectional study was used in conducting this study, where all variables were measured at the same point in time with no prospective or retrospective follow-up.

Setting: The study was carried out in the medical, surgical, obstetric, special surgery, and emergency departments as well as the dialysis and Intensive Care Units at Suez Canal University Hospitals.

Subjects: The sampling population consisted of all diploma and bachelor nurses working in the same previous mentioned study settings, and providing direct patient care. The only inclusion criterion was at least one-year of experience in the setting. The nurses working in administrative positions were excluded. The total number of eligible nurses was 300. The sample size was calculated to detect a correlation coefficient of 0.25 or higher between the score of professional values and each of the scores of clinical decision-making or organizational commitment, corresponding to a small effect size according to **McLeod (2019)**. Using the statistical software package of UCSF Clinical and Translational Science Institute (**Hulley et al., 2013**), the required sample size for 95% level of confidence and 85% power was 141 nurses. This was increased to 171 nurses to compensate for an expected non-response rate of approximately 20%. A purposive sampling technique was used in recruiting nurses in the sample according to the eligibility criteria.

Data collection tool: A self-administered questionnaire including three different scales for the nursing Professional Value, Nurse Decision Making, and organizational commitment was used in collecting the data, in addition to a section for nurses' personal characteristics such as, age, gender, residence, marital status, nursing qualification, work department and experience years.

The Nursing Professional Value Scale (NPVS) was developed by **Weis and Schank (2009)** to assess the level of nurses' professional values. It was translated into Arabic by **Allari (2016)**. The scale consists of 26 items on a 5-point Likert Scale ranging from “most

important” to “not important.” They are categorized into five dimensions: Caring (9 items) assessing issues related to patients such as protecting their rights, maintaining their privacy and confidentiality and acting as patient advocate; Activism (5 items) involving issues of participation in public policy decisions, active involvement in health-related activities, participation in activities of professional nursing associations; Trust (5 items) such as ongoing self-evaluation, seeking additional education, maintaining competency; Professionalism (4 items) as participation in peer review, promoting and maintaining standards; Justice (3 items) covering protecting health and safety of the public, promoting equitable access to care, meeting health needs of culturally diverse population.

Scoring system:

The responses from “most important” to “not important” were scored from 5 to 1. The scores of each dimension and for the total scale were summed-up so that a higher score indicates higher professional values. The total scores were calculated by summing of all categories where $\geq 75\%$ indicate high level of professional values, 74-50% indicate moderate level of professional values and $< 50\%$ indicate low level of professional values (**Zayan, et al., 2010**).

The Clinical Decision-Making in Nursing Scale: This tool was originally developed by **Lauri and Salanterä (2002)** with high construct validity and reliability. It is a 56-item following the 4-stage process of decision-making, namely data collection, processing and identification of problems, plans of action, and implementation/evaluation. The researchers modified the tool and translated it into Arabic using translation-

back-translation technique. This tool included 24 items assessing the four stages of clinical decision making, with 6 items for each stage.

Scoring system:

The responses are on a 5-point Likert scale ranging from "almost always" to "almost never." These were scored respectively from 5 to 1. The negatively stated items were reverse-scored so that a higher score indicates better decision-making. The total scores were calculated by summing of all categories where high level of decision making >78 indicate intuitive student, moderate level of decision making 68-78 indicate flexible decision making/ both analytical and intuitive student and low level of decision making < 67 indicate analytical student (Zayan, et al., 2010).

The Organizational Commitment Scale: This scale was used to assess the level of organizational commitment among staff nurses. It was developed by Allen and Meyer (1990) and adapted from Cohen (2007). The tool has 24 items equally divided into the three types of commitment: Affective commitment such as "I enjoy discussing my organization with people outside it;" Normative commitment such as "I feel that I have too few options to consider leaving this organization;" and Continuance commitment such as "right now, staying with my organization is a matter of necessity as much as desire."

Scoring system:

The responses are on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." For scoring, these were given scores ranging from 5 to 1, with reverse scoring for negative items so that a higher score indicates more

commitment. The scores of each type and for the total scale were summed up and divided by the number of items to yield a standardized score ranging between 1 and 5. Then, the sums of scores were converted into percent scores. For categorical analysis, score of 60% or higher in each dimension was considered as high commitment while a lower score 60% was considered low commitment (Zayan, et al., 2010).

Tool validity: The study tools were reviewed by a panel of 3 experts in nursing administration (one professor at the Faculty of Nursing, Zagazig University, and two professors at the Faculty of Nursing, Ain-shams University). They rigorously reviewed the tool for relevance, comprehensiveness, and clarity for face and content validation. Their comments were useful in fine-tuning of the tool.

Tool reliability: It was done by examining their internal consistency. They demonstrated high reliability with Cronbach's Alpha coefficients 0.937 for the professional value scale, 0.947 for the clinical decision making scale, and 0.908 for the organizational commitment scale.

Operational Design

The operational design includes the preparatory phase, pilot study, and the fieldwork.

Preparatory phase

The researchers reviewed past, current, local and international related literature and theoretical knowledge concerning professional values, decision-making process, and organizational commitment among nurses using textbooks, articles, internet, periodicals to

get acquainted with the research problem and to adjust the study tools.

Pilot study

It was carried out 18 nurses from the study settings in order to test the reliability, feasibility and applicability of the tools. It also helped in estimating the time needed for data collection. The tools were finalized accordingly, and the participants were included in the main study sample.

Fieldwork

After getting official approvals to conduct the study, the researchers visited the study settings and provided the nurses with a brief orientation to describe the nature of the study and invited them to participate. Those who gave their oral informed consent to participate were set in groups of 10-15 nurses to fill the self-administered questionnaire after providing them with the necessary instructions. Participants filled the forms individually in the presence of one of the researchers to ensure that the forms are filled without interactions so as to avoid any one being influenced by others. The researcher provided clarifications in an impartial way upon request. The time for filling the form ranged between 20 and 25 minutes. The process of data collection lasted for three months from March to May 2019.

Ethical considerations Verbal consents were taken from nurses to participate in the study. They were informed about the aim and procedures of the study. They were reassured about confidentiality of any obtained information, and were informed about their rights to refuse or withdraw at any time. The study procedures could not entail any harmful effect on participants. The study protocol

was approved by the research ethics committee in faculty of nursing, Suez Canal University.

Administrative Design

An official approval for data collection was obtained from the Dean of the Faculty of Nursing at Suez Canal University who addressed a letter to the authorities of the hospital administration based which included the purpose of the study and a photocopy of the data collection tool in order to get the permission and help for collecting data.

Statistical Design

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians and interquartile ranges for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of the scales used through testing their internal consistency. Quantitative continuous data were compared using Mann-Whitney or Kruskal-Wallis tests. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors of the scores of organizational commitment, clinical decision-making, and professional values, multiple linear regression analysis was used and analysis of variance for the full regression models was done. Statistical significance was considered at p -value <0.05 .

Results

The study sample involved 171 nurses whose age ranged between 21 and

55 years, with a majority of females (91.8%) as presented in Table 1. Most of them were diploma degree nurses (78.9%), married and from urban areas. The highest percentage were working in special surgery departments (33.3%), while the lowest were in obstetrics (8.2%). Their experience years ranged from one to 37 years, median 10.0 years.

As illustrated in Table 2, nurses' professional values mean scores ranged from 3.11 for the "trust" domain to 3.68 for the "professionalism" domain. Their total mean score was 3.47 from a maximum of five, and the first quartile was 3.08 indicating that at least three-fourth of them were having more than 60% of the maximum attainable score of professional values. As regards decision-making, the mean scores ranged between 2.51 for the "data collection" domain and 2.79 for the "implementation/ evaluation" domain. The third quartile score was 3.21, indicating that only around one-fourth of them were having a score reaching 2.64% of the maximum attainable score. As for the organizational commitment, the highest score was for the continuance commitment (3.98) whereas the lowest was for the affective commitment (3.74). Overall, the median commitment score was 3.90 meaning that at least one-half of the nurses were having a total commitment score reaching 3.85% of the maximum attainable score.

Table 3 points to statistically significant relations between nurses' scores of professional values, clinical decision-making, and organizational

commitment on one hand and their nursing qualification ($p<0.001$) and work department ($p<0.001$) on the other hand. As evident from the table, the scores of all three scales were higher among those having a bachelor degree, and among those working in ICUs.

As displayed in Table 4, nurses' scores of professional values and clinical decision-making had a strong positive statistically significant correlation ($r=0.865$). Meanwhile, their organizational commitment scores had weak statistically significant positive correlations with their scores of professional values and clinical decision-making. The table also shows weak statistically significant positive correlations with their level of nursing qualification.

In the multivariate analysis, Table 5 indicates that nurses' age and bachelor degree were statistically significant positive independent predictors of their scores of professional values, while their experience years was a negative predictor. As regards the decision-making score, the only significant independent predictor was the professional values score. It was a positive predictor, and it explained 73% of the variation in the decision-making score. The table also demonstrates that nurses' experience years and bachelor degree were statistically significant positive independent predictors of their scores of organizational commitment, while their age was a negative predictor.

Table 1: Demographic characteristics of nurses in the study sample (n=171)

	Frequency	Percent
Age:		
<30	53	31.0
30-	70	40.9
40+	48	28.1
Range	21.0-55.0	
Mean \pm SD	34.8 \pm 7.9	
Median	33.0	
Gender:		
Male	14	8.2
Female	157	91.8
Residence:		
Rural	68	39.8
Urban	103	60.2
Marital status:		
Unmarried	36	21.1
Married	135	78.9
Nursing qualification:		
Bachelor	36	21.1
Diploma	135	78.9
Department:		
Medical	27	15.8
Surgical	22	12.9
Obstetrics	14	8.2
Special surgery	57	33.3
Emergency	15	8.8
Dialysis	17	9.9
ICU	19	11.1
Experience years:		
<5	21	12.3
5-	53	31.0
10+	97	56.7
Range	1.0-37.0	
Mean \pm SD	12.0 \pm 7.4	
Median	10.0	

Table 2: Scores of professional values, clinical decision-making, and organizational commitment among nurses in the study sample (n=171)

	Score (max=5)				
	Mean	SD	Median	Quartiles 1 st	3 rd
Professional values:					
Caring	3.43	0.91	3.67	2.75	4.00
Activism	3.28	0.94	3.33	2.33	4.00
Justice	3.53	0.48	3.44	3.14	3.89
Professionalism	3.68	0.72	3.71	3.18	4.29
Trust	3.11	0.78	3.25	2.50	3.75
Total professional values	3.47	0.61	3.42	3.08	4.00
Clinical decision-making:					
Data collection	2.51	0.63	2.67	1.83	3.00
Data management	2.63	0.62	2.67	2.04	3.17
Work plan	2.64	0.69	2.83	2.17	3.17
Implementation/evaluation	2.79	0.70	2.83	2.21	3.33
Total clinical decision-making:	2.64	0.61	2.75	2.13	3.21
Organizational commitment:					
Affective	3.74	0.48	3.75	3.50	4.13
Continuance	3.98	0.53	4.13	3.63	4.38
Formative	3.83	0.51	3.88	3.50	4.25
Total organizational commitment:	3.85	0.46	3.90	3.54	4.21

Table 3: Relations between nurses' scores of professional values, clinical decision-making, and organizational commitment and their characteristics

	Professional values			Clinical decision-making			Organizational commitment		
	Score (max=5)		p-value	Score (max=5)		p-value	Score (max=5)		p-value
	Mean±S	media n		Mean±S	media n		Mean±S	media n	
Age:									
<30	3.4±0.6	3.38	0.27	2.6±0.6	2.71	0.56	3.8±0.5	3.79	0.47
30-	3.6±0.6	3.52		2.7±0.6	2.77		3.9±0.4	3.92	
40+	3.4±0.6	3.48		2.7±0.6	2.77		3.8±0.5	3.90	
Gender:									
Male	3.3±0.6	3.18	0.14	2.4±0.7	2.63	0.13	3.8±0.4	3.88	0.62
Female	3.5±0.6	3.46		2.7±0.6	2.75		3.8±0.5	3.88	
Residence:									
Rural	3.4±0.6	3.38	0.42	2.6±0.6	2.77	0.48	3.9±0.4	3.83	0.95
Urban	3.5±0.6	3.50		2.7±0.6	2.71		3.9±0.5	3.92	
Nursing qualification:									
Bachelor	4.1±0.3	4.25	<0.001*	3.2±0.2	3.25	<0.001*	4.2±0.3	4.23	<0.001*
Diploma	3.3±0.5	3.31		2.5±0.6	2.58		3.8±0.5	3.75	
Marital status:									
Unmarried	3.5±0.6	3.46	0.77	2.6±0.6	2.67	0.74	3.8±0.5	3.86	0.47
Married	3.5±0.6	3.38		2.6±0.6	2.75		3.9±0.4	3.88	
Department:									
Medical	2.9±0.6	2.77	<0.001*	2.0±0.6	1.75	<0.001*	4.1±0.2	4.17	<0.001*
Surgical	3.4±0.4	3.48		2.7±0.5	2.81		3.7±0.4	3.75	
Obstetrics	3.1±0.6	3.00		2.2±0.7	2.21		3.9±0.3	4.00	
Special surgery	3.5±0.4	3.38		2.7±0.5	2.75		3.7±0.5	3.67	
Emergency	3.7±0.6	3.38		2.9±0.4	2.75		3.7±0.5	3.50	
Dialysis	3.8±0.6	3.73		2.9±0.5	2.92		3.9±0.5	3.75	
ICU	4.2±0.1	4.19		3.3±0.1	3.29		4.2±0.2	4.25	
Experience years:									
<5	3.4±0.7	3.46	0.76	2.6±0.7	2.79	0.34	3.9±0.4	4.08	0.56
5-	3.5±0.6	3.2		2.8±0.5	2.75		3.8±0.5	3.83	
10+	3.4±0.6	3.46		2.6±0.6	2.75		3.9±0.4	3.88	

(*). Statistically significant at $p < 0.05$

Table 4: Correlation matrix of the scores of professional values, clinical decision-making, and organizational commitment and with their characteristics

	Spearman's rank correlation coefficient		
	Professional Values	Clinical Decision-making	Organizational commitment
Professional values	1.000		
Clinical decision-making	.865**	1.000	
Organizational commitment	.284**	.295**	1.000
Characteristics:			
Age	.104	.100	.072
Qualification	.321**	.311**	.335**
Experience	-.076	-.090	.016

(**) Statistically significant at $p < 0.01$

Table 5: Best fitting multiple linear regression model for the organizational commitment, clinical decision-making, and professional values scores

	Unstandardized Coefficients		Standardized Coefficients	t-test	p-value	95% Confidence Interval for B	
	B	Std. Error				Lower	Upper
Professional values score							
Constant	2.82	0.26		10.779	<0.001	2.30	3.33
Age	0.02	0.01	0.30	2.078	0.039	0.00	0.05
Experience years	-0.03	0.01	-0.31	2.128	0.035	-0.05	0.00
Bachelor degree	0.69	0.11	0.47	6.251	<0.001	0.47	0.91
r-square=0.31 Model ANOVA: F=26.36, p<0.001							
Variables entered and excluded: gender, residence, marital status							
Clinical decision-making score							
Constant	-.33	.14		-2.347	.020	-.61	-.05
Professional values score	.86	.04	.86	21.499	<0.001	.78	.94
r-square=0.73 Model ANOVA: F=462.19, p<0.001							
Variables entered and excluded: age, gender, nursing qualification, experience, residence, marital status							
Organizational commitment score							
Constant	4.77	0.26		18.250	<0.001	4.25	5.28
Age	-0.02	0.01	-0.41	-2.590	0.010	-0.04	-0.01
Experience years	0.03	0.01	0.48	3.013	0.003	0.01	0.05
Bachelor degree	0.57	0.09	-0.51	-6.314	<0.001	0.39	0.75
r-square=0.18 Model ANOVA: F=13.55, p<0.001							
Variables entered and excluded: gender, residence, marital status							

Discussion

The present study was aimed at assessing the professional values among nurses at Suez-Canal University Hospitals, and to examine its relationship with their clinical decision-making and organizational commitment. The findings point to generally high professional values scores among them. The inter-relationships among their scores of professional values, clinical decision-making, organizational commitment are significant and positive. The findings lead to acceptance of the set research hypothesis.

According to the present study results, the nurses' professional values scores were relatively high, with at least three quarters of them having a score exceeding 60% of the maximum attainable score. The finding reflects a strong positive attitude towards nursing as a career among them, and their belief and conviction with it as a profession with high morals and ideals as justice, caring, trust, and activism. In agreement with this, a study carried out by **Bijani et al. (2019)** revealed that more than two thirds of the participating nurses were having high levels of professional values, and this was associated with effective role achievement among them.

Concerning decision-making skills, the current study results demonstrated that the participating nurses were having lower scores. Thus, the results indicate that those having a mean score exceeding 60% of the maximum attainable score constituted only about one-fourth of the study sample. Such low level of decision-making skills could be attributed to the fact that the majority of the sample consisted of diploma degree nurses who are often executors who just apply orders and decisions made by

others, whether nursing supervisors or physicians. This is confirmed by the finding that the scores of clinical decision-making were significantly higher among the nurses carrying a bachelor degree in comparison with diploma degree nurses. Moreover, these latter may not have enough competencies to make decisions, or even may be afraid of making decisions. The finding is in congruence with **Riahi et al. (2016)** whose study revealed that only one-fourth of the studied nurses were having good decision-making skills; they added that such inability of making decision had a negative impact on their work.

The current study has also assessed organizational commitment among nurses. The results showed high related scores in all three types of commitment, particularly the continuance type. Moreover, more than a half of them were having very high scores of total commitment, approaching 80% of the maximum attainable score. The finding reflects general satisfaction with the work among them and their willingness to retain their jobs. In line with this result, **Nunes and Gaspar (2017)** in a study in Australia found that more than half of the nurses were having high levels of organizational commitment, and this was associated with high job satisfaction among them.

Regarding the factors affecting nurses' professional values, decision-making, and organizational commitment, the bivariate analyses of the present study revealed that the nursing qualification had a significant influence on all of them. Thus, the bachelor degree nurses were having significantly higher scores in comparison with their diploma degree peers. The higher scores of the bachelor degree nurses are expected given their higher sense of professionalism based on

their having a university degree, and this higher qualification would make them more capable of decision-making. These factors would thus lead to better organizational commitment among them. The positive effect of the higher nursing qualification persisted in multivariate analysis for the decision-making and organizational commitment scores. In line with this, **Khastavaneh et al. (2018)** reported significantly lower levels of organizational commitment among diploma degree nurses in comparison with those having a bachelor degree.

Another factor significantly affecting nurses' professional values, clinical decision-making, and organizational commitment the bivariate analyses was the work department. Thus, the scores of the three scales were higher among those working in ICUs in comparison with the other departments. This might be explained by that the work in ICUs although stressful, yet is more dependent on professionalism and ability of decision-making. Moreover, the nurses working in these critical settings are often better qualified and have better training. In congruence with this, **Bacon et al. (2019)** in a study in North Carolina found that critical care nurses' participation in decision-making was higher in comparison with those in general care units. Additionally, **Ludin (2018)** in a study on Malaysian critical care nurses reported high levels of decision-making skills, and this was correlated to their critical thinking.

The multivariate analyses of the present study have also identified nurses' age and experience years as significant predictors of their professional values and of organizational commitment scores. However, these two factors were having reciprocal effects on these two scores. Thus, age was a significant positive

predictor of the professional values score and a negative predictor of the organizational commitment score. Conversely, nurses' experience years was a significant negative predictor of their professional values score and a positive predictor of their scores of organizational commitments. The findings might be explained by that older age nurses might have deeper insights of nursing professional values, but their commitment to stay and continue work is lowered as they approach the retirement age. On the other hand, the longer experience would increase their seniority with more enhancement of their job status; this would increase their organizational commitment.

In agreement with this, **Nunes and Gaspar (2017)** identified nurses' age as a negative predictor for their organizational commitment. As for experience, our result is in line with those of **Alammar et al. (2016)** who similarly demonstrated that nurses' organizational commitment is positively related to their years of experience. Moreover, and in line with our findings, **Fernández-Feito et al. (2019)** in a study in Spain found that the nurses with longer experience were having the lowest scores of professional values in comparison with the nursing students and the newly graduated ones.

The present study has also examined the inter-relationships among nurses' scores of professional values, decision-making, and organizational commitment. The correlation analyses revealed that all three scores were significantly and positively correlated. However, a strong almost perfect positive significant correlation was revealed between the scores of professional values and clinical decision-making. Moreover, in the multivariate analysis, nurses' professional values score was identified

as the only significant positive predictor of their decision-making score, and it explained a considerable proportion (73%) of the variation in this score. Thus, nurses' decision-making is strongly influenced by their professional values since these values influence their approaches in handling situations and problem-solving, and help them to make the right decision.

In congruence with these foregoing present study findings, **Poorchangizi et al. (2017)** reported that nurses' professional values and clinical decision-making were positively and significantly correlated. On the same line, **Nibbelink and Brewer (2018)** demonstrated a positive correlation between nurses' decision-making and their professional values. Additionally, **Fernández-Feito et al. (2019)** highlighted that nurses' professional values have a significant impact on their clinical decision-making skills. Thus, **Yarbrough et al. (2017)** claimed that professional values could be indirectly assessed through the evaluation of certain aspects of nurses' decision-making skills.

Conclusion

The study findings lead to the conclusion that the nurses in the study settings have high professional values and organizational commitment, with lower decision-making skills. The scores of professional values are positive predictors of the clinical decision-making scores.

Recommendations

Based on results of the present study, it is recommended that:

1.The hospital administration should enhance their nurses' abilities in

decision-making through staff development programs.

2. Professional values should be emphasized in nursing schools' curricula.

3. Organizational support should be provided for newly hired nurses to enhance and strengthen their commitment to organization.

Further research suggested that:

- The relation between professional values and quality of work life among staff nurses.

- The relation between professional values and clinical decision-making among nurse interns..

Financial support

No funding was received

Conflicts of Interest Disclosure

The authors declare that there is no conflict of interest.

References

- Aktaş Y.Y., and Karabulut N. (2017):** Professional values in Turkish undergraduate nursing students and its reflection on caring behavior. *Kontakt*; 19(2): e116–e121.
- Al Shammari F., Grande R., Vicencio D., and Al Mutairi S. (2017):** Nurses' professional values on patient care provisions and decisions. *Journal of Nursing Education and Practice*; 7(9):78-84.
- Alammar K., Alamrani M., Alqahtani S., and Ahmad M. (2016):**

- Organizational commitment and nurses' characteristics as predictors of job involvement. *Nursing Leadership*; 29(4): 59-69.
- Allari R.S. (2016):** Nursing Professional Values Scale: Psychometric Properties of Arabic Version. *International Journal of Recent Scientific Research*; 7(Issue, 9): 13240-13244, September, 2016
- Allen N.J. and Meyer J.P. (1990):** The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*; 63, 1-18.
- Ayaz-Alkaya S., Yaman-Sözbir Ş., and Bayrak-Kahraman B. (2018):** The effect of nursing internship program on burnout and professional commitment. *Nurse Educ Today*.;68:19-22. doi:10.1016/j.nedt.2018.05.020
- Bacon C.T., Shrestha S., and Jenkins M. (2019):** Nurses' Participation in Clinical and Administrative Decisions in Different Types of Hospital Units. *J Nurs Adm*.;49(3):163-170. doi:10.1097/NNA.0000000000000731
- Bijani M., Tehranineshat B., and Torabizadeh C. (2019):** Nurses', nursing students', and nursing instructors' perceptions of professional values: A comparative study. *Nurs Ethics*.;26(3):870-883. doi:10.1177/0969733017727153.
- Cohen A. (2007):** Dynamics between Occupational and Organizational Commitment in the Context of Flexible Labor Markets: A Review of the Literature and Suggestions for a Research Agenda. Bremen: Institute Technology and Education, 28.
- Donmez R.O., and Ozsoy S. (2016):** Factors influencing development of professional values among nursing students. *Pak J Med Sci*; 32(4):988-993.
- Fernández-Feito A., Basurto-Hoyuelos S., Palmeiro-Longo M.R., and García-Díaz V. (2019):** Differences in professional values between nurses and nursing students: a gender perspective. *Int Nurs Rev*.;66(4):577-589. doi:10.1111/inr.12543
- Hulley S.B., Cummings S.R., Browner W.S., Grady D., and Newman T.B. (2013):** Designing clinical research: an epidemiologic approach. 4th ed. Philadelphia, PA: Lippincott Williams & Wilkins; Appendix 6C, page 79.
- Ibrahim S.A., and Qalawa S.H.A. (2016):** Relationship between faculty staff professionalism and nursing students' values. *Journal of Nursing Education and Practice*; 6 (9): 38-45.
- Kaya H., Isik B., and Senyuva E. (2016):** Personal and professional values held by baccalaureate nursing students. *Nursing Ethics*;1 -16
- Khastavaneh M., Dehbanizadeh A., Hosseini N., Razmjooei P., Movaghghar M., Zabolypour S., and Hosseini M. (2018):** Comparing spiritual intelligence and emotional intelligence of nurse managers with commitment of nurses of Yasuj University of medical sciences. *Amazonia Investiga*; 7(13): 101-109.
- Lauri S., and Salanterä S. (2002):** Developing an instrument to measure

- and describe clinical decision making in different nursing fields. *Journal of Professional Nursing*; 18(2): 93- 100.
- Ludin S.M. (2018):** Does good critical thinking equal effective decision-making among critical care nurses? A cross-sectional survey. *Intensive Crit Care Nurs.*;44:1-10. doi: 10.1016/j.iccn.2017.06.002
- McLeod S.A. (2019):** What does effect size tell you? Simply psychology: <https://www.simplypsychology.org/effect-size.html>
- Nibbelink C.W., and Brewer B.B. (2018):** Decision-making in nursing practice: An integrative literature review. *Journal of Clinical Nursing*; 27(5-6): 917-928.
- Nunes E.M.G.T., and Gaspar M.F.M. (2017):** Quality of the leader-member relationship and the organizational commitment of nurses. *Revista da Escola de Enfermagem da USP*; 51: 1-6.
- Parandeh1 A., Khaghanizadel M., and Mohammadi E. (2015):** Factors influencing development of professional values among nursing students and instructors: A systematic review. *Journal of Health Science*; 7(2):282-293.
- Dehghani A., Mosalanejad L., and Dehghan-Nayeri N. (2015):** Factors affecting professional ethics in nursing practice in Iran: A qualitative study. *BMC Med Ethics*; 16:61.
- Poorchangizi B., Borhani F., Abbaszadeh A., Mirzaee M., and Farokhzadian J. (2019):** Professional Values of Nurses and Nursing Students: a comparative study. *BMC Med Educ.*;19(1):438. Published 2019 Nov 27. doi:10.1186/s12909-019-1878-2
- Poorchangizi B., Farokhzadian J., Abbaszadeh A., Mirzaee M., and Borhani F. (2017):** The importance of professional values from clinical nurses' perspective in hospitals of a medical university in Iran. *BMC medical Ethics*; 18(1): 1-7.
- Pourama A., Forouzi M.A., and Asadabadi A. (2015):** Professional values from nursing students' perspective in Kerman province: A descriptive study. *Medical Ethics and History of Medicine*; 7(6):79-88.
- Riahi S., Thomson G., and Duxbury J. (2016):** An integrative review exploring decisionmaking factors influencing mental health nurses in the use of restraint. *Journal of Psychiatric and Mental Health Nursing*; 23(2): 116-128.
- Rubio-Navarro A., García-Capilla D.J., Torralba-Madrid M.J., and Ruty J. (2020):** Decision-making in an emergency department: A nursing accountability model. *Nurs Ethics.*;27(2):567-586. doi:10.1177/0969733019851542
- Stainton K., and Hughson J. (2017):** *Tabbner's Nursing Care: Theory and Practice.* 7th ed., Australia: Elsevier Health Sciences, pp. 41 -45.
- Weis D., and Schank M.J. (2009):** Development and psychometric evaluation of the nursing professional values scale-revised. *J Nurs Meas.*; 17(3): 221-231.
- Yarbrough S., Martin P., Alfred D., and McNeill C. (2017):** Professional values, job satisfaction, career development, and intent to stay. *Nursing Ethics*; 24(6): 675-685.
- Zayan M., Reizian E., and Hamouda M. (2010):** Relationship between organizational climate and nurses' outcomes. *J Am Sci*; 9(5): p 184-192. Available at <http://www.jofamericanscience.org>