

Evaluation of the Observance of Nursing Professional Ethics Codes in Nurses and Nursing Students of Kashan University of Medical Sciences

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Abstract

Aims: The aim of this study was to investigate the observance of professional ethics codes for nurses and nursing students of Kashan University of Medical Sciences.

Materials & Methods: This descriptive cross-sectional study was performed on 200 students and 360 nurses after convenience sampling after adapting to the inclusion criteria. The data collection tool was a valid and reliable researcher-made questionnaire, which included two sections of demographic information and 20 questions on a 5-point Likert, in order to comply with the codes of ethical regulations of the nursing profession. Data were analyzed using SPSS software version 16. According to the results of this study, the mean scores of professional ethics in both groups of nurses (3.99) and students (4.25) were higher than the average (i.e., hypothetical average = 3). In other words, the level of professional ethics was above average. The mean scores of professional ethics in nurses and students were not significantly different except for education and research. Statistical tests did not show a significant relationship between the demographic characteristics of nurses and nursing students and the mean scores of compliance with professional ethics codes.

Conclusion: Considering the relatively favorable level of professional ethics codes in nurses and nursing students, it seems that maintaining and improving the current situation should be considered by the authorities through the adoption of appropriate strategies.

Keywords

Codes of Ethics [<https://www.ncbi.nlm.nih.gov/mesh/?term=Codes+of+Ethics>];

Nurses [<https://www.ncbi.nlm.nih.gov/mesh/68009726>];

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Introduction

Professional ethics includes the principles and moral values of a professional system, which is the observer of ethics in a professional environment [1]. In many professions, these principles have been developed as codes or ethics of professions that must be observed by the employees of the organization [2]. Observance of ethics in the nursing profession is also very important in improving and restoring their health by influencing the spiritual behavior of nurses with responsibility towards patients [3]. In some cases, moral care is sometimes superior to the technical aspects of nursing because of the greater relationship between the patients and the patient's relationship [4]. A review of studies has shown that nurses' awareness of ethics and related issues has been associated with increasing the quality of medical services and patient satisfaction [6, 5], increasing organizational commitment [7], increasing spirituality in the workplace [8], and reducing deviant behaviors at work [9]. However, despite this effect of ethics on the quality of nursing care, the results of some studies have shown that nurses are not aware of the existence of ethical codes and it has been stated that if there are such codes, it can only be for students [11, 10]. Sokhanvar also stated that the level of knowledge and application of ethical principles in the care and clinical decision-making in Shiraz University nurses was not desirable and nurses were not able to apply ethical knowledge in the real environment [12]. It has also been observed that many nurses consider the ethical issues they encounter in their work, but in contrast, because they do not have enough power and support to react and sometimes do not know what to do and do not do anything [13]. In addition, there have been rapid changes in healthcare settings; nurses face many ethical issues in their day-to-day practice and are therefore at greater risk of ethical conflict with patient care [15, 14].

Nurses need to focus on professional ethics in nursing in order to function properly and avoid risks. Achieving all these requires and depends on education and research in the field of ethics and the use of ethical codes [16]. Therefore, it is necessary to observe the codes of ethics of the nursing profession from the origin of nursing education, i.e. nursing schools because following them, nursing students will face better moral challenges [17-20].

Measuring the observance of ethical codes in nurses and nursing students can be a criterion for measuring their performance in the health care system so that by identifying their weaknesses in the practice of ethics, the necessary measures can be taken to eliminate them [21]. On the other hand, the importance of applying ethical codes of commitment of the nursing profession in providing safe care for patients is essential [22, 16]. However, so far in the hospitals of Kashan University of Medical Sciences, no research has been conducted to assess the performance of

nurses and nursing students in relation to the code of professional ethics. The aim of this study was to investigate the level of observance of codes of ethics of nursing professionals in nurses and nursing students of Kashan University of Medical Sciences.

Materials and Methods

This research is a descriptive cross-sectional study with the aim of investigating the observance of nurses' professional ethics regulations in nurses and nursing students of Kashan University of Medical Sciences. The study population included all nursing students studying in the School of Nursing of Kashan University of Medical Sciences who had completed at least five semesters of education and all nurses working in Shahid Beheshti Hospital of Kashan University of Medical Sciences who had at least six months of experience in the hospital and at least a bachelor's degree. The number of samples considered for this study included all nurses working in Shahid Beheshti Hospital in Kashan and nursing students of the University of Medical Sciences who met the inclusion criteria. Accordingly, 360 nurses and 200 nursing students were studied through convenience sampling.

The data collection tool was a researcher-made questionnaire based on a review of the literature [23, 2] that was taken from the codes of ethics of nursing professionals in the Islamic Republic of Iran, which was developed by the Ministry of Health and Medical Education. The content validity of the instrument was confirmed using the opinion of 10 experts in the field of ethics and nursing education. Content validity ratio (CVR) was 0.7 and content validity index (CVI) was 0.94. The reliability of the instrument was calculated using the correlation coefficient index through the retest method in a pilot study on 10 students and nurses in two shifts with an interval of ten days equal to 0.86. The questionnaire consisted of two parts. The first part of demographic information (gender, age, job position, experience of participating in the ethics workshop) and the second part consisted of 20 questions arranged on a five-point Likert scale (always 5, often 4, sometimes 3, very little 2, never 1). The degree of observance of the codes of this code of nursing ethics from the dimensions of nurse and society (1 question), nurse and professional commitment (6 questions), nurse and clinical services (7 questions), nurse and other colleagues (1 question) and nurse and education and research (5 questions) was examined. To calculate the total score of each domain, the total score of the questions was added together and then divided by the total number of questions in that domain. Thus, the minimum and maximum scores were between 1 and 5.

Questionnaires without the name of subjects along with the form of informed consent, while observing the principle of confidentiality and attention to the desire of individuals to participate in the study, were

distributed by the author after providing the necessary explanations (individually or in groups) about the questionnaire and how to complete it among nursing students and nurses working in the hospital according to the sample size and application of inclusion criteria.

Data were analyzed by SPSS 16 using descriptive indices of frequency, mean, standard deviation, as well as ANOVA, Man-Whitney test, Kruskal-Wallis test, and t-test to determine the difference between the mean scores of more than two-state barriers and two-state variables.

Findings

Out of 560 questionnaires distributed among eligible individuals, 536 (95.71%) were returned. Also, 349 samples (65.1%) were nurses and 187 (34.9%) were nursing students. As can be seen in Table 1, 57.8% of nurses were female and the mean age of nurses participating in the study was 31.53 ± 6.96 years. Also, 153 nurses (43.8%) participated in the ethics workshop. The highest frequency was related to nurses (260, 74.5%) the lowest frequency was related to the supervisors (10, 2.9%). The mean age of participants was 21.94 ± 5.06 years (31.53 ± 6.96 in nurses group and 21.94 ± 5.06 in nursing students).

Table 1) Frequency, mean, and standard deviation of the studied samples

variable	Nurses N (%)	Nursing students N (%)
Gender		
Female	201 (57.8)	95 (50.8)
Male	148 (24.4)	92 (49.2)
Participation in an ethics workshop		
Yes	153 (43.8%)	73 (39)
No	196 (56.2%)	114 (61)
Job position in hospital		
Student	-	187 (100)
Nurse	282 (80.8)	-
Shift manager	46 (13.1)	-
Matron	11 (3.2)	-
Supervisor	10 (2.9)	-

Also, 50.8% of students were female and out of 187 students, (39%) 73 cases participated in the ethics workshop.

The results of Table 2 show that at the descriptive level, the average rank of professional ethics and its domains in students was higher than nurses. In order to compare the average opinions of the two groups of nurses and students on the level of professional ethics, due to the lack of significance of Leven's test, a nonparametric Mann-Whitney U test was used instead of an independent t-test. The results indicated that the professional ethics scores of nurses and students were not significantly different except for education and research ($p > 0.05$).

Regarding the nurse and education and research domain, the average score of nurses was 254.971 and the average score of students was 293.75, which this difference was significant; therefore, it can be said

that the average score of students in this field was higher than nurses (Table 2).

In order to compare the mean scores of the observance of codes of professional ethics and its domains with the criterion score (mean 3), a univariate t-test was used. According to the findings of Table 3, the average level of compliance with the codes of professional ethics and its domains in both groups of nurses and students was higher than the average (i.e., the hypothetical average = 3) ($p \leq 0.05$). In other words, the level of observance of professional ethics and its areas was above average and the performance of the research sample in this field was relatively desirable.

The results of Table 4 show that at the descriptive level, the average score of professional ethics codes in students who participated in the nursing ethics workshop was higher than students who did not participate in the workshop. Also, the average score of observing the codes of professional ethics in female students was higher than in male students.

In order to evaluate the significance of these differences after Leven's test ($p > 0.05$) with the aim of investigating the default homogeneity of variances, a t-test was used. The results of the t-test showed that the t-value for the score of observance of professional ethics codes in both variables of gender and participation in ethics workshops with a degree of freedom of 185 was greater than 0.05. Therefore, it can be concluded that the average score of the questionnaire of compliance with the codes of professional ethics by attending the workshop and gender are not significantly different.

Also, in order to compare the mean scores of nurses' professional ethics codes according to the presence in the workshop, due to the lack of significance of Leven's test, the non-parametric Mann-Whitney test was used instead of the independent t-test. The results indicated that there was no significant difference in the average score of nurses' compliance with the codes of professional ethics in terms of attendance at the nursing ethics workshop ($p < 0.05$). Statistical tests also showed that the mean score of the questionnaire of observance of codes of professional ethics in nurses by gender was not significantly different.

The data in Table 5 show that the highest average rank of compliance with professional ethics codes in nurses by job position in matrons and supervisors was 236.68 and 221.30, respectively. Also, the lowest average rank was related to nurses with an average of 171.62. In order to investigate the differences in the level of observance of codes of professional ethics in nurses by job position, after examining the heterogeneity of variances while performing the Kolmogorov-Smirnov test ($P < 0.05$), the Kruskal-Wallis test was used. Based on this test, $X^2 = 6.610$ and $P < 0.05$, it can be concluded that in this study, the level of observance of professional ethics codes in nurses does not differ by job position

Table 2) Comparison of the observance of professional ethics codes by nurses and students

Domains of professional ethics	Group	Mean of ranks	Sum of ranks	Mann-Whitney U test	Z	p-value
Nurse and community	Nurse	263.12	91828	30753	-1.20	0.22
	Student	278.55	52088			
Nurse and professional commitment	Nurse	267.55	93376.50	323011.500	-0.19	0.84
	Student	270.26	50539.50			
Nurse and providing clinical services	Nurse	271.69	94821	31517	-0.65	0.51
	Student	262.54	49095			
Nurse and other colleagues	Nurse	262.20	91507.50	30432	-1.41	0.15
	Student	280.26	52408.50			
Nurse and education and research	Nurse	254.971	88995	27910	-2.78	**0.005
	Student	293.75	54931			
Total score of professional ethics	Nurse	266.97	93171.50	32096.500	-0.31	0.75
	Student	271.36	50744.50			

Table 3) Univariate t-test of the score of professional ethics and its domains considering a criterion score of 3 in students and nurses

Dimensions	Group	Mean±SD	p-value	T	Mean difference
Nurse and community	Nurse	4.09±1.25	0.001	16.41	1.09
	Student	4.37±0.74	0.001	20.47	1.37
Nurse and professional commitment	Nurse	3.88±1.01	0.001	16.22	0.88
	Student	4.09±0.55	0.001	34.29	1.09
Nurse and providing clinical services	Nurse	3.96±1.05	0.001	17.13	0.96
	Student	4.13±0.56	0.001	27.37	1.13
Nurse and other colleagues	Nurse	4.09±1.25	0.001	16.23	1.09
	Student	4.37±0.81	0.001	23.29	1.37
Nurse and education and research	Nurse	3.94±1.1	0.001	Mar-16.	0.94
	Student	4.30±0.64	0.001	27.66	1.30
Total score of professional ethics	Nurse	3.99±1.07	0.001	17.28	0.99
	Student	4.25±0.50	0.001	34.29	1.25

df=348 for all dimensions

Table 4) Comparison of the average scores of the observance of the codes of professional ethics of nurses and nursing students according to participation in the nursing ethics workshop and gender

Nursing students		Mean±SD	Leven's test	T	Df	p-value	Mean difference
Participation in an ethics workshop	Yes	4.34±0.50	F 1.32	1.92	185	0.056	0.14
	No	4.20±0.59					
Gender	Female	4.23±0.50	0.105	0.69	185	0.48	0.05
	Male	4.28±0.49					
Nurses		Mean of ranks	Sum of ranks	Mann-Whitney U test	Z	p-value	
Participation in an ethics workshop	Yes	170.03	26015	14234	-0.81	0.41	
	No	178.88	35060				
Gender		Mean±SD	Leven's test	T	Df	p-value	Mean difference
	Female	3.97±1.07	F 0.01	0.30	347	0.75	0.035
	Male	4.01±1.08					

Table 5) Comparison of the observance of professional ethics codes in nurses by job position

Job position	Mean±SD	Mean of ranks	Kruskal-Wallis test
Nurse	3.92±1.14	171.62	df= 3; X ² =6.610; p=0.085
Shift manager	4.23±0.51	170.9	
Matron	4.36±1.04	236.68	
Supervisor	4.45±0.54	221.30	

The aim of this study was to investigate the degree of observance of codes of ethics of nursing professionals in nurses and nursing students of Kashan University of Medical Sciences. In this study, the level of observance of professional ethics codes and its domains in nurses and students was evaluated as above average, which showed the optimal performance of the study sample; this finding is

Discussion

consistent with the results of Dehghani and Ghobadi studies, in which the level of compliance with professional ethics codes was reported at a good level [25, 24]. However, the results of some other studies indicate poor and insufficient observance of the principles of professional ethics in nurses [26]. Sokhanvar *et al.* reported that the level of knowledge and application of ethical principles in the care and clinical decision-making in Shiraz University nurses is not satisfactory and ethical knowledge has not been applied in the real work environment [12]. One of the possible reasons for this difference in the report on the observance of professional ethics regulations can be considered as the difference in the tools used in the research. Sokhanvar *et al.* [26, 12] used a checklist for observing the performance of nurses was completed by the researcher; however, in this study, the questionnaire was completed through the self-report method, which is likely to give the participants in the study a higher score (compared to what they actually adhere to).

Despite the differences in clinical experiences between the two groups of participants (students and nurses), in this study, the mean score of professional ethics codes in both groups in all domains of professional ethics except education and research were not significantly different from each other so that the lowest average score is the level of observance of codes of professional ethics by nurses in the field of nursing and education and research. This finding is consistent with the results of the study of Mousavi *et al.* [27]. Kalvandi *et al.* also reported the minimum level of observance of codes of professional ethics by nurses in the field of nursing and education and research [28]. It seems that the reason for the higher average score of students compared to nurses is due to the time gap between academic training and clinical work. Obviously, paying attention to the importance of quantity and quality of in-service training in this regard can be effective.

In this study, no significant relationship was observed between the level of professional ethics in the two groups in terms of demographic information and the status of participation in the ethics workshop. In this regard, Kalvandi *et al.* showed that there is no positive and significant relationship between nurses' demographic information and the degree of ethics [28]. However, in some studies, a significant relationship has been reported between the level of professional ethics by gender [29, 25]. The reason for the inconsistency of this finding in the current study with other studies can be attributed to differences in the tools used and differences in the conditions and atmosphere of the studied communities.

Also, the findings of this study in line with other studies showed that there is no significant relationship between the level of professional ethics by nurses' job positions [25, 28].

In the present study, it was found that there is no

statistically significant relationship between the variable of attending the ethics workshop and the degree of observance of nursing professional ethics codes. However, the average scores of the nursing professional ethics codes of the group that participated in the ethics workshop were higher than those who did not have a history of participating in the ethics workshop. This finding is consistent with the results of the study by Jafari Manesh *et al.* [21] that this finding is important for holding workshops and in-service training for nurses in compliance with the codes of professional ethics. The results of a study in New Zealand on nursing students showed that nursing students face many ethical problems when entering the clinical environment, including violation of patient rights, violation of autonomy, violation of the principle of confidentiality, lack of respect, and patient dignity in the clinical environment. Therefore, they must improve their ability to make moral decisions [30]. Orthog also stated that although nurses are constantly faced with ethical issues and problems in bed, only 5.9% of the studied samples have completed in-service ethics courses [32, 31]. Also, ethics education is very effective in raising people's awareness of ethical issues and their application in the workplace [32]. Therefore, it is necessary to direct educational programs in hospitals and universities towards the development of ethical care and with a competency-based approach [25].

One of the limitations of this study was the participants' concern, fear, or possible reluctance to tell the truth or what they actually adhered to. Accordingly, it is recommended that future research examine this issue in ways other than nurses' self-report methods, such as observation and checklists, or by reviewing codes of professional ethics with the participation of patients as stakeholders in nursing care. A relatively small sample size and study of university students and nurses in a hospital may be other limitations of the study, which reduces the generalizability of the results. Therefore, multicenter studies are more recommended using large sample sizes.

Conclusion

Considering the relatively favorable level of professional ethics codes in nurses and nursing students in this study, it seems that maintaining and improving the current situation should be adopted by the authorities by creating appropriate strategies by creating an ethical and appropriate environment by using coherent professional ethics exercises during education and in-service period. Also, they should try to improve the environmental conditions in the treatment centers in order to observe the ethical standards and to remove the existing barriers to observe the behavior of ethical professions, to observe the best standards or professional ethics.

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Ethical Permissions: This study was approved by the Research Committee of Kashan University of Medical Sciences (97110) and by the Ethics Committee (IR.KAUMS.REC.1397.012). Then, after obtaining permission from the Vice-Chancellor for Research and Student Affairs, it was implemented and the informed consent of all participants was obtained.

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