
Original Article

Comparison of Nurses' Professional Behaviour in the Educational Settings and the Workplaces

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Abstract

Introduction: Activities of a nurse are not limited to his/her knowledge and skills in the management of patients, but they need to have some characteristics related to their job. These characteristics in general are referred to professional behaviour. The present study is an attempt to compare professional behaviours in an educational setting (nursing students) and workplace (nurses).

Methods: This is a cross-sectional descriptive-analytic study. The data were collected using NPVS-R standard questionnaires used in two versions; self-report questionnaires completed by the study groups and assessment questionnaires completed by the authorities. The students and nurses were sampled through census and cluster sampling, respectively. The sample size included 80 patients (40 samples per study group), and finally 160 questionnaires were completed by them. After collecting the data, they were entered to the SPSS18 software and then analyzed using descriptive statistics, independent t-test, and paired t-test.

Results: The highest mean score of the two study groups based on self-report and assessment questionnaires was obtained in assessment of nurses by head nurses, and the lowest score was obtained in self-reports of the nurses. There was no significant statistical difference between the study groups ($P = 0.322$). However, the mean score obtained from student assessments by instructors and professors and the mean score obtained from assessment of nurses by the head nurses were significantly different in terms of pragmatism ($P = 0.05$) and freedom ($P > 0.001$).

Conclusion: The results obtained from evaluation of the eight factors related to professional nursing behaviour highlight the professional behaviour in the workplace and educational settings, extension of this behaviour from educational settings to the workplace, and even promotion of that. Thus, culture building and holding in-service training courses and including the professional behaviour education in the curriculums of students are highly recommended.

Keywords: Professional behaviour, Nursing students, Nurses, Workplace, Educational setting

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Introduction

Employment in health care and medical sectors is not limited to acquisition of knowledge and skills but requires certain human characteristic known as professional behavior considered necessary for this profession. In fact, professional behaviour is defined as a set of responsibilities, including healthcare and respect to the personal needs of the patient, recognition and application of cultural matters in clinical care, peer support and commitment towards the medical community to fulfill the goals of the medical science (1), responsibility, honesty, conscientiousness, and respect are regarded as the main aspects of professional behaviour (2). Therefore, a better understanding of the professional behaviour importance among nurses requires providing a definition for the word "profession" that includes selection of a job requiring long-term training and official qualification. When nurses identify the core values of their profession and choose this profession to improve people's lives, in fact, they have come to understand the importance of professional behavior and emphasize on it (3). In addition, the nature of this profession and its relationship with patients is such that more and better commitment can double professional behaviour. However, in environments where patients are provided with services, some staff may show behaviours quite consistent with the principles of professional behaviour and are fully committed to these principles, while some other staff may not present many acceptable behaviours in these environments.

Many medical faculties around the world have included certain courses in their curriculum to teach the elements of professional behaviour. In addition to the training courses held during the study period, the patient care and observance of professional behaviour in the training hospitals, are also expected to form such values in the graduates (1). This process happens again when the graduates enter their workplace; in such cases, the professional behaviour learned in the educational settings undergoes changes and is affected by the working environment. Therefore, individuals may show some behaviours in their workplace which are not consistent with the instructions given to them previously. These changes sometimes improve professional behaviour and sometimes leave opposite impacts. However, having professional behaviour in the health care and medical professions is one of the basic needs of patients in hospitals. There is no such course as professional behaviour in the educational system of our country, and some aspects of professional behaviour are only taught in a limited and non-functional way within other courses. In addition, these behaviours are limitedly accounted for in the in-service training courses. Therefore, professional

behavior is somehow included in the hidden learning domain, that is, it is learned in the educational settings or through contact with peers in the workplace (4).

In addition, nurses form the largest health care provider groups and their professional competencies play a significant role in accomplishing the mission of health systems. Moreover, the success of the empowering programs depends on the concept of empowerment (5). West (2007) attached great importance to the influence of personal and environmental factors on professional behaviour and regarded personal and environmental stress factors very effective in observing the principles of professional behaviour (6).

In another qualitative study conducted by Yamani et al., participants introduced five themes namely exchange of information, accountability for human dignity, kindness, trust attraction and professional accountability as the lessons of professional behaviour in the clinical training. The study of positive and negative experiences in the lessons of professional behaviour reveals the role of hidden curriculum in clinical training which is transferred to the students through educational settings (7). Another study conducted by Akbari et al. focused on the initial assessment of interns' attitudes towards the professional behaviour education programs and the role of instructors in educating these principles through theoretical and practical trainings. This confirmed the effect of workplace and educational setting on the professional behaviour (8).

According to the previous studies carried out in this field, it is necessary to investigate the professional behaviour values and the teaching methods of professionalism from different perspectives. Because it seems necessary, due to many reasons, to change the culture of educational settings and workplace in order to move towards promotion of professional behaviour (adherence to professional principles). Hence, due to the importance of professional behaviour of nurses in the health care field and the need for educational and administrative planning in this regard, and also considering the fact that no related study has ever been conducted in Kermanshah University of Medical Sciences so far, the present study is an attempt to determine and compare the professional behaviour of nurses in the workplace and educational settings. In this study attempts are also made, through comparison of nurses and nursing students' professional behaviour scores in the workplace and educational settings respectively, to propose an adequate program for teaching professional behaviour to nurses and thereby give increasing emphasis on patient satisfaction and human dignity of individuals.

Methods

This is a cross-sectional descriptive-analytic study which was conducted in Kermanshah University of Medical Sciences in 2014. Given that this study was done on two groups, the population consisted of a group of third and fourth year undergraduate students of nursing in the Faculty of Nursing and a group of nurses with more than five years of work experience working in the educational and treatment centers in Kermanshah. Sampling was conducted using census at the Faculty of Nursing and through cluster sampling in the hospitals so that samples could be selected from different health care sectors commensurate with the number of nurses and sectors. A total of 80 subjects (40 from among the nursing students and 40 from among nurses) were selected as the samples of the study.

Scale-Revised Nursing professional values questionnaires (NPVS-R) developed by Weis & Schank and published in the Journal of Nursing Scholarship served as the data collection instrument in this study (9). The questionnaire consisted of two parts; the first part included demographic information and the second part included eight factors with 26 questions (medical care factor with 10 questions, accountability with 2 questions, pragmatism with 7 questions, honesty with 1 question, freedom with 1 question, safety with 2 questions and knowledge with 1 question) each investigating professional standards of nursing services individually. The questionnaire was scored by the 5-point Likert scale according to which 26 and 130 were the lowest and highest scores, respectively. The validity and reliability of the questionnaire was approved in a study conducted by Parwan in Tabriz (10). Validity of the study was obtained through content validity in accordance with the valid sources and reference books and other approved questionnaires in this field. It was evaluated after being judged by experts in this field, including faculty members and experts of Vice Chancellor for Research in the field of medical education, and finally approved after some modifications. The reliability of the questionnaire was also calculated as 0.8 after a pilot study on 15 individuals (15 nursing students).

Since each of the subjects in the sample, in addition to completing the questionnaire, was evaluated once through self-report on nursing professional behaviour and once through evaluations by the officials, the questionnaires were used after being edited in two aspects. To do so, the sentences in the self-report questionnaire for the nursing students and nurses were edited using first person singular verbs, and the questionnaire for assessment of nurses and nursing students by their professors included sentences with third person singular verbs.

The questionnaires were distributed among the students and their professors as well as nurses and head nurses in the nursing faculty and the educational and treatment centers, respectively. Therefore, two questionnaires were completed for each subject in the sample: One self-report questionnaire completed by the individuals themselves and a questionnaire for assessment of a given individual by the authorities (in the student group by faculty members and professors, and by head nurses in the nurses groups). Since the sample size consisted of 40 subjects in each group, thus a total of 80 questionnaires per group and consequently a total of 160 questionnaires were completed by the two groups in this study. After entered the data into the SPSS-18 software, due to the differences between the numbers of items in the eight factors, the average standard was calculated for each factor in order to compare and rank the professional behaviour factors. Descriptive statistical methods were used to determine and compare the mean of professional behaviour total score, the mean score of the factors, as well as the minimum and maximum standard deviation. In addition, paired t-test and independent t-test were used to compare the self-report and assessment scores and to compare differences between the two groups, respectively.

Results

In this study, a total of 160 questionnaires were completed by two study groups (80 questionnaires by the nursing students and 80 questionnaires by nurses). This means that 40 self-report questionnaires were completed by the subjects themselves, and 40 assessment questionnaires were completed by the authorities (professors and head nurses in the group of nursing students and nurses, respectively).

The subjects consisted of 23 male participants (8 in the group of students and 15 in the group of nurses) and 57 female participants (32 in the group of students and 25 in the group of nurses); therefore, the female subjects were more than the male ones in both groups. The average age of nursing students and nurses was 22.93 ± 0.99 and 41.18 ± 6.81 , respectively.

Table 1 shows that the highest mean and standard deviation of professional behavior is related to the confidence factor in the self-reports of the nursing students (4.55 ± 0.43), and the lowest mean and standard deviation is obtained for the pragmatism factor in the self-reports of nurses (3.24 ± 0.67), which accounts for the lowest mean and standard deviation in all cases, compared to other factors in each group.

Table 1. Comparison of mean and standard deviation of the professional behaviour scores obtained from self-report and assessment questionnaires in the study groups

	Nurses		Nursing students	
	Assessment of nurses by the head nurses	Self-report by the nurses	Assessment of students by professors	Self-report by the nursing students
Medical care	4.00±0.55	4.02±0.46	4.07±0.41	3.87±0.36
Accountability	4.10±0.60	4.19±0.56	4.35±0.56	4.44±0.49
Pragmatism	3.74±0.68	3.24±0.67	3.45±0.70	3.51±0.61
Honesty	4.17±0.81	4.05±0.71	4.17±0.71	4.27±0.72
Confidence	4.25±0.66	4.40±0.57	4.30±0.62	4.55±0.43
Freedom	4.30±0.65	4.07±0.69	3.50±0.72	3.77±0.83
Safety	4.19±0.58	3.81±0.72	4.14±0.71	3.80±0.55
Knowledge	3.85±0.83	3.55±0.99	4.00±0.85	4.00±0.93

Comparison of the mean and standard deviation scores of the professional behaviour in the two groups (in the form of self-report and assessment by professors and head nurses) is provided in Table 2. This table shows that the highest mean score in the two groups (in the form of self-report and assessment) is obtained in assessment of nurses by head nurses (3.99±0.44), and the lowest mean score is obtained in self-report of nurses (3.82±0.41). In addition,

the total mean score of professional behaviour obtained in self-report of students (3.89±0.30) is higher than the total mean score obtained from self-report of nurses (3.82±0.41), but the total mean score of the students' assessment by their professors (3.93±0.45) is lower than the assessment of nurses by the head nurses (3.99±0.44). In addition, no significant statistical difference was observed between the study groups (P=0.322).

Table 2. Comparison of professional behaviour among nurses and nursing students based on self-report scores and the assessment scores given by professors and head nurses

	Mean	Standard deviation	Mean square	P value*	F value
The self-report score of students	3.89	0.30			
The self-report score of nurses	3.82	0.41			
The score of students assessment by professors	3.93	0.45	0.195	0.322	1.174
The score of nurses assessment by head nurses	3.99	0.44			

*Adjusted for the confounding variable of participants age

Table 3 shows that the mean and standard deviation scores obtained for professional behaviour through self-reports of nursing students (in terms of five factors: Accountability, pragmatism, honesty, confidence and knowledge) are larger than the mean and standard deviation scores obtained for professional behaviour of the nurses through self-reports. However, the mean score

obtained for nursing students in terms of medical care, freedom, and safety, was lower than that obtained for the nurses. In addition, the comparison of the mean score obtained through students and nurses self-reports in terms of the above-mentioned factors showed no significant difference between the two groups.

Table 3. Mean and standard deviation of the professional behaviour in the form of self-reports

		Mean	Standard deviation	Mean square	F value	P value
Medical care	Students	3.87	0.36	0.21	1.21	0.27
	Nurses	4.02	0.46			
Accountability	Students	4.44	0.49	0.26	0.91	0.34
	Nurses	4.19	0.56			
Pragmatism	Students	3.51	0.61	0.52	1.33	0.25
	Nurses	3.24	0.67			
Honesty	Students	4.27	0.72	0.20	0.39	0.53
	Nurses	4.05	0.71			
Confidence	Students	4.55	0.43	0.07	0.21	0.64
	Nurses	4.40	0.57			
Freedom	Students	3.77	0.83	0.53	0.90	0.34
	Nurses	4.07	0.69			
Safety	Students	3.80	0.55	0.80	1.97	0.16
	Nurses	3.81	0.72			
Knowledge	Students	4.00	0.93	0.01	0.01	0.90
	Nurses	3.55	0.99			

Table 4 shows the comparison of the mean and standard deviation of the professional behaviour scores obtained by nursing students and nurses through assessments (assessment and evaluation of students and nurses by professors and head nurses, respectively). This table shows that the scores obtained from students assessment by their professors (in terms of medical care, accountability, confidence and knowledge) are higher

than the scores obtained from assessment of nurses by the head nurses. However, this order is the other way round in terms of other factors. Comparison of the mean scores obtained from assessment of nursing students by professors compared to the scores obtained from assessment of nurses by the head nurses shows that there is a significant difference between the two groups in terms of pragmatism ($P=0.05$) and freedom ($P<0.001$).

Table 4. Mean and standard deviation of the professional behaviour scores obtained through assessments

Factor	Group	Mean	Standard deviation	Mean square	F value	P value
Medical care	Students	4.07	0.41	0.01	0.01	0.93
	Nurses	4.00	0.55			
Accountability	Students	4.35	0.56	0.53	1.59	0.21
	Nurses	4.10	0.60			
Pragmatism	Students	3.45	0.70	1.71	3.56	0.05
	Nurses	3.74	0.68			
Honesty	Students	4.17	0.71	0.01	0.01	0.96
	Nurses	4.17	0.81			
Confidence	Students	4.30	0.62	0.02	0.04	0.81
	Nurses	4.25	0.66			
Freedom	Students	3.50	0.72	15.34	34.89	<0.001
	Nurses	4.30	0.65			
Safety	Students	4.14	0.71	0.08	0.18	0.66
	Nurses	4.19	0.58			
Knowledge	Students	4.00	0.85	0.15	0.21	0.64
	Nurses	3.85	0.83			

Discussion

Given the importance of nurses' professional behaviour in terms of having a good relationship with the patients together with acquisition of the nursing knowledge and skills, eight factors namely medical care, accountability, pragmatism, honesty, confidence, freedom, safety and

knowledge were investigated through NPVS-R standard questionnaires formulated in two formats of self-report questionnaires (completed by nursing students and nurses working in different wards) and assessment questionnaires (completed by professors in student groups and by head nurses in the group of nurses). Finally, the professional behaviour scores of nurses were determined

and investigated in the workplace and educational settings.

According to the results of Table 1, it seems that the lower mean and standard deviation obtained in the self-report of the nurses compared to the nursing students, although insignificant, may be due to the effect of workplace. Since students were exposed to direct instruction and worked under supervision of instructors, they try to observe the professional behaviour. However, nurses, because of problems in, difficulties associated with their job, heavy workload, pressure on the part of their colleagues and high expectations from them, seem to have become somehow indifferent to some aspects of professional behaviours and that's why they have achieved lower scores compared to the nursing students. On the other hand, the highest mean and standard deviation scores of professional behaviour obtained from the assessment of nurses by the head nurses, compared to the study conducted in 2007 by West, in which great importance was attached to the effect of personal and environmental factors on professional ethics and the influence of personal and environmental stressors, culture of the educational centers and pressures of work on compliance with the principles of professional behavior were emphasized, show that also in the present study the 8 factors actually investigate the personal aspects and the work environment of nurses. Just like the results of the West study, the results of this study emphasize the importance and impact of all the above-mentioned factors discussed in the study, although the effect of these factors is usually negative and results in lower scores (6).

Table 2 shows the mean and standard deviation of the scores obtained from different aspects of professional behaviour and indicates that the results of this study are consistent, in terms of the professional behaviour importance in professions related to medical services, with the results of Saberi et al. study on the initial assessment of assistants' attitudes towards the professional behavior education programs and the role of instructors in this regard. In the study conducted by Saberi et al., the assistants emphasized the role of educating professional behaviour principles and stated that the education programs have achieved a moderate-to-high success in different areas of professional behaviour training. In addition, in the present study, emphasis on all factors of professional behaviour by students, instructors, nurses and head nurses should be regarded as an important point in education of the professional behaviour principles, since, in the present study the mean and standard deviation of the total score obtained for all factors and both groups yielded high scores within the range of 1-5. In general, comparison of the results obtained from the two studies also shows that the

importance of professional behaviour in the study groups (assistant nurses and nurses) has been emphasized (8).

According to Table 2, the mean score obtained through self-reports of the nursing students group is higher than the mean score obtained through self-reports of nurses. However, the mean scores obtained from assessment of nursing students and nurses by the professors and head nurses respectively were nearly equal. The results of this study showed that the nursing students, compared to nurses, have attached higher values to professional behaviour, and this is partly due to the nature of their work that is done in the presence of professors and instructors in different wards, since the members of this group, compared to nurses who assume full responsibility for the patients and act autonomously, have considered themselves more capable in terms of the above mentioned factors for professional behaviour, and this shows the influence of the environment (educational environment for students) on the performance of individuals. The nearly equal mean scores obtained from assessment of nursing students and nurses by professors and head nurses respectively show the necessity of professional behaviour in the nursing profession, which were almost equal in both environments (educational environment for nursing students and the work environment for nurses) and therefore proved to be irrelevant to the environment of nursing profession. Since this study was the first study to compare two groups through self-report and assessment in order to determine the effect of changing work environment on the professional behaviour, no similar study was found to draw comparisons between the results.

Some of the factors examined in this study may largely include factors that have been studied by Hojet et al. (2004) as the main component of professional ethics. Contrary to the results of Hojet study, the factors studied in the present study have not undergone significant changes over time. Evidently, according to Table 3, the results obtained from self-reports of nursing students and nurses are nearly the same (11). Although the self-report scores obtained from the nurses group are lower than the ones obtained from the nursing students group, and there is no statistically significant difference between the results in this regard, this difference can be attributed to the working environment, because frequent encounters with ethical issues may cause nurses to change their attitudes towards professional behaviours or observing them.

The study conducted by Parwan et al. at Tabriz University of Medical Sciences is only similar to the present study in terms of one of the hypotheses. In other words, in their study, Parwan et al. just investigated the attitudes of nursing students and did not deal with other objectives of the present study. In addition, the items considered for

professional behaviour in that study overlap with the professional behaviour factors of the present study. As the results of this study in Table 3 showed, confidence and pragmatism are the most and least important factors of professional behaviour, respectively. In addition the results of the present study, in terms of the least important factor, are inconsistent with the results of Parwan et al. in type I universities and, consistent, in terms of the most important factor, with the results obtained from type II universities.

In a qualitative study conducted by Yamani et al. at Isfahan University of Medical Sciences, 10 professors and 10 interns of internal medicine and surgery wards were selected through purposive sampling and interviewed using semi-structured interview. Their study included at least two objectives of the present study (the opinions of both students and professors about the subject matter). Although these studies differed in terms of student groups and methodology, 5 themes introduced by students and professors as the main lessons of professional behaviour in the field of medical education have also been included in the present study. The evaluation of these factors through self-reports of the nurses and the nursing students (Table 3) and through assessments carried out by professors and head nurses (Table 4) can prove the similarity between these two studies (7).

However, the results in Table 4 show that there is a significant difference between the assessment scores of professional behaviour, in terms of pragmatism and freedom, obtained by the nurses and nursing students. The results also show that the professional behaviour scores obtained by nurses are higher than those obtained by nursing students. This difference again can be attributed to the work environments, because nurses with more than 5-year work experience are considered to have higher pragmatism and freedom due to having higher work experience and professional skills, but, as students work under supervision of their professors, they are considered to have lower pragmatism and freedom.

In another study conducted by Haj Baqeri et al., five categories including application of knowledge and skills, authority, self-confidence, support and solidarity made up the concept of professional behaviour. The participants in the research regarded the professional competence of nurses as a phenomenon that is influenced by the above factors and depends on their ability to apply knowledge and professional skills in providing services and nursing medical cares based on their own diagnosis in response to the needs of clients. The findings of this study are consistent with the findings of Sneed and Pelletier. Their results also overlap with the self-report results of the present study in terms of the first three factors

(knowledge, freedom and confidence) and are consistent with previous studies (12, 13, 14).

The study conducted by Jafari et al. on some nursing students is just in line with one of the hypotheses of the present study. In this study, some codes of nursing professional behaviour such as commitment and confidentiality, promotion of knowledge and competence, conscientiousness and conflict management, overlapped with the factors investigated in the present study (confidence, knowledge, pragmatism and accountability). Greater observance of conflict management aspects compared to other codes of professional behaviour in this study is consistent with the higher percentage of nursing students' self-report scores in terms of pragmatism. However, no statistically significant relationship was observed between working experience and the observance of ethical codes in that study, and this is quite inconsistent with the results obtained from self-reports of nurses in the present study (15).

In addition, in this study professional behaviour training was highlighted as one of the courses of study in the curriculum of students. This is consistent with the results of the study conducted by Jolaei, which showed the positive effect of ethics education, and also with the results of Wehrwe in the positive role of ethics education in promoting students awareness of ethics and their application in the work environments (16 and 17).

Conclusion

The results of the present study which investigated eight factors related to professional nursing behaviour show that the educational environment and the workplace affect the professional behaviour of nursing students and nurses just in terms of pragmatism and freedom. In order to demonstrate the effectiveness of the educational environment on professional behaviour, the study requires larger samples and more objective methods, such as observation and review of documentations. On the other hand, the results of the present study increasingly revealed the need for continuous measurements to assess and promote the professional behaviour. The results also showed that inclusion of professional behaviour in the curriculum system of nursing students and in the training programs for systematic training of nurses can lead to promotion of these skills in the educational settings and in the workplace. The results of such studies can also help us pay increasing attention to the need for continuous educational programs for training professional behaviour and also formulate appropriate educational and training programs for the working and educational environments to improve professional nursing behaviour trainings,

which finally lead to patient satisfaction and improved environmental and working conditions.

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