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# Assessment of Professional Values Among Iranian Nursing Students Graduating in Universities With Different Norms of Educational Services

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**ABSTRACT**

**Background:** Values used by the nursing profession are essential in order to maintain high standards of the nursing care.

**Objectives:** The aim of this study was to compare the perspective of nursing students from type I and III universities of medical sciences about professional values of nursing in Iran.

**Materials and Methods:** In this cross-sectional survey, we investigated the professional values of nursing profession among 240 B.Sc. (Bachelor of Science) in nursing students randomly selected from three type I and five type III universities in Iran in 2011. A two-part questionnaire containing demographic features and the Nursing Professional Values Scale-Revised (NPVS-R) developed by Weis and Schank with 26 Likert-scale items was used after translation and validation.

**Results:** The mean scores of the NPVS-R items on the five point Likert-type scales for students of type I ranged from 2.79 to 4.08. Also, the mean scores of items for the students of type III ranged from 3.03 to 4.43. The most important and least important items identified by the participants of type I universities were the "maintain competency in area of practice "and "participate in peer review", respectively. The most important and least important items identified by the participants of type III universities were the "maintain confidentiality of patient" and "participate in public policy decisions affecting distribution of resources", respectively. Examination of the participants by families' economic condition revealed significant differences in some of the scores about the NPVS-R statements ($P < 0.05$).

**Conclusions:** The present study did not show any significant difference between perspectives of students studying in type I and III universities regarding nursing professional values. Moreover, both groups of nursing students rated the values directly related to patient care as the most important. Integrated planning and teaching methods is required to enhance all fields of the professional values in nursing.

▶ *Implication for health policy/practice/research/medical education:*
Definition of nature values apprehended by graduating nursing students, can lead to a more effective development of educational programs. Characterizing the level of importance for each value among graduating students, is essential for enhancing the quality of care provided for patients and promoting the nursing profession.

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## 1. Background

Professional values are defined as encouraging standards of action that are favorable by professional practitioners and provide a framework for evaluating behavior (1-4). In the context of nursing profession, values are essential in order to maintain high standards of the nursing care (2). In this regard, many studies have shown the effectiveness of formal nursing educational curricula, which contain focused education of professional values (5). Based on current evidence, education of professional nurses in terms of professional values should be initiated early at the student stage. The students should also be able to recognize the expected tasks and responsibility while they are in faculty (6). Although the importance of nursing curricula containing core professional nursing values is well established, a few nursing schools have already incorporated them into their curricula formally (7).

Ranking of universities and educational institutions could be useful for both short-term and long-term scheduling (8-9). According to the plan of ranking of educational services, all medical sciences universities were ranked into three main categories -type I to III- in Iran (10). In such ranking, several criteria are considered including available facilities and equipment, management, counseling and support systems, students' output and output of faculty members (11). The medical sciences universities of type I and III have the highest and lowest levels of educational services, respectively.

Despite of the great emphasis on the evaluation of nursing professional values, number of the studies conducted in Asia remains very low. Also, few studies have been conducted to evaluate the professional values and disclose their correlates in Iran (12-14).

## 2. Objectives

The purpose of this study was to evaluate and compare the perception of nursing students studying in type I and III universities about nursing professional values. We also sought to identify the possible correlates of professional values among B.Sc. (Bachelor of Science) in nursing students in the highest and lowest level of educational services in Iran.

## 3. Materials and Methods

In this cross-sectional study, we investigated the professional values of B.Sc. in nursing students of type I and III universities in their last clinical courses, from April to June 2011. Participants had to be previously enrolled in the last semester of a baccalaureate nursing program at a particular four year public university (type I or III) located in Iran. Exclusion criteria also included any history of professional values and ethics training in nursing apart from undergraduate programs, formal work experience and teaching in health care settings in addition to being transferred from other universities.

A stratified cluster sampling method was used. Total calculated sample size was 240 participants consisting of 120 students from each one of the type I and III universities. Subsequently, medical sciences universities and then students were randomly selected. Eight universities were randomly selected, consisting of three type I and five type III universities. Type I universities included Esfahan, Shiraz and Tabriz and type III included Bojnord, Boshehr, Jahrom, Fasa and Lorestan.

For data collection, a two-part questionnaire was used; the first part included demographic variables and the second part included the Nursing Professional Values Scale-Revised (NPVS-R) developed by Weis and Schank (2000), which consisted 26 items (15). A Likert-scale instrument was used to reflect the value statements in the Code of Ethics for Nurses. Participants were asked to rate the degree of importance of each item ranging from one (not important) to five (most important), with total scores ranging from 26 to 130. The more importance an individual ascribes to a scale, the higher total score will be reflected for an item indicating greater congruency with the professional values measured by the NPVS-R.

The English original version of the NPVS-R questionnaire was translated to Farsi by a forward–backward translation method. Content validity of the instrument was approved and seven faculty members in nursing assessed the instrument's intelligibility and clarity of its content. After introducing the amendments, this version of the instrument was pilot tested with 60 nursing students which yielded a Cronbach's alpha of 0.81.

Application of the NPVS-R was approved by the author of the tool. After receiving ethical approval from Tabriz Institutional Review Board (IRB), ethical approval was also obtained from all participating universities' authorities. The purpose of the study and instructions on completing the questionnaires were explained to all participants and their rights in this study such as confidentiality of personal data and withdrawal from the study as preferred were clearly described to them. They were also assured that their participation would not affect their academic results.

Descriptive statistics such as frequency distribution, mean, and standard deviation were used to summarize data. Due to non-normal distribution of data, non-parametric tests were performed. Mann-Whitney and Kruskal-Wallis tests were used to estimate the differences of means between the groups. A post-hoc analysis was performed using the Bonferroni adjustment method for multiple comparisons. Correlation between variables was estimated by Spearman's rho correlation coefficient. $P$ values less than 0.05 were considered statistically significant. Data were analyzed using SPSS (for Windows, version 13).

## 4. Results

A total of 240 nursing students completed the NPVS-R questionnaire. Most of the subjects were female (65.7%)

**Table 1.** Demographic Characteristics of B.Sc. in Nursing (BSN) Students

| Variable | BSN Students of Type I University, No. (%) | BSN Students of Type III University, No. (%) | Total Sample No. (%), (n = 240) |
|---|---|---|---|
| Gender | | | |
|   Female | 79 (65.8) | 78 (65.5) | 157 (65.7) |
|   Male | 41 (34.2) | 41 (34.5) | 82 (34.3) |
| Marital status | | | |
|   Single | 102 (85) | 99 (83.2) | 201 (84.1) |
|   Married | 18 (15) | 20 (16.8) | 38 (15.9) |
| Economical status of family | | | |
|   Income equal to expenses | 82 (68.9) | 82 (71.3) | 164 (70.1) |
|   Income Less than Expenses | 21 (17.6) | 19 (16.5) | 40 (17.1) |
|   Income over expenses | 16 (13.4) | 14 (12.2) | 30 (12.8) |
| Ethnic group | | | |
|   Turkish | 33 (27.7) | 8 (6.8) | 41 (17.4) |
|   Persian | 71 (59.7) | 75 (64.1) | 146 (61.9) |
|   Kurdish | 5 (4.2) | 9 (7.7) | 14 (5.9) |
|   Lurish | 10 (8.4) | 17 (14.5) | 27 (11.4) |
|   Arabian | - | 3 (2.6) | 3 (1.3) |
|   Other | - | 5 (4.3) | 5 (2.1) |
| Informal work experience in nursing | | | |
|   Yes | 30 (25) | 36 (30.3) | 157 (65.7) |
|   No | 90 (75) | 83 (69.7) | 82 (34.3) |

and single (84.1%). Most students in this study had Persian ethnicity (61.9%) and had no experience of previous informal work in nursing (72.4%). The majority of the participants (70.1%) chose the "equality of income and expenditure" to describe the economic situation of their families. The mean age of total participants was 22.57 years (range 21–29, SD = 1.12); the mean age of students in type I universities was 22.51 years (range 21–29, SD = 1.19) and for students in type III universities was 22.64 years (range 21–28, SD = 1.05). The average score of the course in the past semesters for students in type I universities was 16.37 (SD = 1.34) and in type III universities was 16.31 (SD = 1.03). *Table 1* shows some of the demographic characteristics of participants. Three top statements rated by the type I universities' participants were "maintain competency in area of practice", "maintain confidentiality of patient" and "protect moral and legal rights of patients". Moreover, in this group of participants the statements of "participate in peer review", "participate in activities of professional nursing associations" and "protect rights of participants in research" were the lowest rated statements (*Table 2*). The items scores ranged from 2.79 to 4.08 with a mean score of 3.51 (SD = 0.62).

According to table 2 in NPVS-R statements of nursing professional values, the statements "maintain confidentiality of patient", "seek additional education to update knowledge and skills" and "protect moral and legal rights of patients" received the highest scores among students of type III universities, while the "participate in public policy decisions affecting distribution of resources",

"participate in peer review" and "engage in on-going self-evaluation" statements obtained the lowest level of importance. The scores of NPVS-R statements in this students ranged from 3.03 to 4.43 with the mean score of 3.67 (SD = 0.47). The most highly valued items among total participants included "maintain confidentiality of patient", "maintain competency in area of practice" and "seek additional education to update knowledge and skills". The items rated with the least scores by B.Sc students were "participate in peer review", "participate in public policy decisions affecting distribution of resources" and "protect rights of participants in research". The NPVS-R statements' scores ranged from 2.92 to 4.24 (*Table 2*) with a mean score of 3.59 (SD = 0.55).

In this study, no significant difference regarding the total scores of NPVS_R items of professional values between the two groups of students was identified *(Table 3)*, but significant differences were observed in seven items of 26 NPVS-R statements between the two groups of nursing students (*Table 2*). There were also significant differences between the type I and III nursing students' professional values according to variable of "economical conditions of family" (*Table 4*). Among type I students, there were significant differences between the perspectives about the professional values among the groups of students who addressed family's economical conditions as "income equal to expenses" with those who introduced the families' economic situation as the "income less than expenses". The group of students that addressed families' economic conditions as the "income less than expenses"

**Table 2**. Comparisons of the NPVS-R Item Mean Scores in Graduating B.Sc. in Nursing (BSN) Students of Type I and III Universities (Mann-Whitney U test). Scoring was Made by Using a Likert-Type Scale from 1 = Not Important to 5 = Most Important

| Item | BSN Students of Type I Universities Mean (SD) | BSN Students of Type III Universities Mean (SD) | Total Participant Students Mean (SD) | *P* value |
|---|---|---|---|---|
| Engage in on-going self-evaluation | 3.15 (1.02) | 3.17 (0.96) | 3.16 (0.99) | 0.95 |
| Request consultation / collaboration when unable to meet patient needs | 3.62 (0.89) | 3.63 (0.88) | 3.62 (0.88) | 0.96 |
| Protect health and safety of the public | 3.87 (0.89) | 4.05 (0.86) | 3.96 (0.88) | 0.11 |
| Participate in public policy decisions affecting distribution of resources | 3.13 (1.15) | 3.03 (1.02) | 3.08 (1.09) | 0.61 |
| Participate in peer review | 2.79 (0.89) | 3.05 (1.01) | 2.92 (0.96) | 0.03 [a] |
| Establish standards as a guide for practice | 3.51 (1.11) | 3.68 (1.06) | 3.59 (1.09) | 0.29 |
| Promote and maintain standards where planned learning activities for students take place | 3.83 (1.17) | 3.93 (0.97) | 3.88 (1.07) | 0.71 |
| Initiate actions to improve environments of practice | 3.76 (1.01) | 3.72 (0.99) | 3.74 (1) | 0.68 |
| Seek additional education to update knowledge and skills | 3.92 (1.03) | 4.23 (0.84) | 4.08 (0.95) | 0.02 [a] |
| Advance the profession through active involvement in health related activities | 3.50 (1.04) | 3.68 (0.99) | 3.59 (1.02) | 0.18 |
| Recognize role of professional nursing associations in shaping health care policy | 3.25 (1.30) | 3.34 (0.99) | 3.29 (1.15) | 0.68 |
| Promote equitable access to nursing and health care | 3.71 (1.03) | 3.94 (0.97) | 3.83 (1) | 0.08 |
| Assume responsibility for meeting health needs of the culturally diverse population | 3.61 (1.04) | 3.67 (1.21) | 3.64 (1.13) | 0.42 |
| Accept responsibility and accountability for own practice | 3.93 (0.90) | 3.96 (1.05) | 3.95 (0.97) | 0.56 |
| Maintain competency in area of practice | 4.08 (0.96) | 4.13 (0.93) | 4.11 (0.94) | 0.70 |
| Protect moral and legal rights of patients | 3.94 (0.95) | 4.14 (0.86) | 4.04 (0.91) | 0.10 |
| Refuse to participate in care if in ethical opposition to own professional values | 3.40 (1.16) | 3.43 (1.25) | 3.41 (1.20) | 0.75 |
| Act as a patient advocate | 3.40 (0.92) | 3.38 (1.01) | 3.39 (0.96) | 1 |
| Participate in nursing research and/or implement research findings appropriate to practice | 3.09 (1.08) | 3.22 (1.05) | 3.15 (1.07) | 0.40 |
| Provide care without prejudice to patients of varying lifestyles | 3.43 (1.08) | 3.74 (0.96) | 3.59 (1.03) | 0.03 [a] |
| Safeguard patient's right to privacy | 3.62 (1.02) | 4.04 (0.98) | 3.87 (1.01) | 0.005 [a] |
| Confront practitioners with questionable or inappropriate practice | 3.20 (1.14) | 3.58 (1.03) | 3.39 (1.10) | 0.01 [a] |
| Protect rights of participants in research | 3.07 (1.01) | 3.18 (1.06) | 3.13 (1.04) | 0.42 |
| Practice guided by principles of fidelity and respect for person | 3.56 (1.07) | 3.83 (0.86) | 3.70 (0.98) | 0.04 [a] |
| Maintain confidentiality of patient | 4.05 (0.99) | 4.43 (0.82) | 4.24 (0.92) | 0.002 [a] |
| Participate in activities of professional nursing associations | 3.05 (1.11) | 3.33 (1.07) | 3.19 (1.09) | 0.06 |

[a] Significance is two-tailed.

**Table 3.** Comparison of the Total NPVS-R Items Mean Scores Between Graduating B.Sc. in Nursing (BSN) Students of Type I and III Medical Sciences Universities

| Participant Group | N | Range | Mean | SD | CI[a] | Mann-Whitney U | Sig. |
|---|---|---|---|---|---|---|---|
| BSN students of type I universities | 120 | 48-130 | 90.92 | 16.54 | 87.93-93.91 | 6265.5 | 0.08 |
| BSN students of type III universities | 120 | 65-120 | 95.08 | 12.56 | 92.81-97.35 | | |

[a] Abbreviation: CI, confidence interval

**Table 4.** Comparison of the NPVS-R Item Mean Scores Between Graduating B.Sc. in Nursing (BSN) Students of Type I and III Universities With Various Characteristics (Mann-Whitney U and Kruskal-Wallis Tests)

| Variable | BSN Students of Type I University, Mean ± SD | Sig. | BSN Students of Type III University, Mean ± SD | Sig. | Total Sample, Mean ± SD (n = 240) | Sig. |
|---|---|---|---|---|---|---|
| Gender | | 0.06 | | 0.63 | | 0.10 |
|   Female | 92.87 ± 15.66 | | 95.63 ± 12.62 | | 94.24 ± 14.25 | |
|   Male | 87.17 ± 17.72 | | 94.17 ± 12.68 | | 90.67 ± 15.71 | |
| Marital status | | 0.40 | | 0.93 | | 0.54 |
|   Single | 91.45 ± 15.41 | | 95.16 ± 13.05 | | 93.28 ± 14.38 | |
|   Married | 87.94 ± 22.20 | | 94.95 ± 10.42 | | 91.63 ± 17.17 | |
| Economical status of family | | 0.001[a] | | 0.001[a] | | 0.0002[a] |
|   Income equal to Expenses | 94.02 ± 16.18 | | 95.23 ± 12.92 | | 94.63 ± 14.61 | |
|   Income Less than Expenses | 80.71 ± 16.61 | | 89.10 ± 11.41 | | 84.70 ± 14.82 | |
|   Income over expenses | 88.87 ± 13.54 | | 104.36 ± 6.74 | | 96.10 ± 13.30 | |
| Ethnic group | | 0.65 | | 0.10 | | 0.10 |
|   Turkish | 90.54 ± 15.76 | | 87.75 ± 10.40 | | 90 ± 14.80 | |
|   Persian | 90.39 ± 17.16 | | 94.77 ± 12.61 | | 92.64 ± 15.11 | |
|   Kurdish | 85 ± 16.40 | | 89.78 ± 9.73 | | 88.07 ± 12.11 | |
|   Lurish | 96.30 ± 13.93 | | 100.65 ± 10.25 | | 99.04 ± 11.68 | |
|   Arabian | - | | 96.33 ± 17.50 | | 96.33 ± 17.50 | |
|   Other | - | | 96.80 ± 18.90 | | 96.80 ± 18.90 | |
| Informal work experience in nursing | | 0.40 | | 0.34 | | 0.25 |
|   Yes | 90.73 ± 13.36 | | 93.30 ± 13.07 | | | |
|   No | 90.99 ± 17.54 | | 95.91 ± 12.40 | | | |

[a] Significance is two-tailed.

had lower NPVS-R mean scores compared to the other group. In type III students, there were significant differences between the perspectives about the professional values among the students who addressed family's economical conditions as "income equal to expenses" with those who introduced the families' economic situation as the "Income over expenses". The group of students that addressed families' economic conditions as the "income equal to expenses" had lower NPVS-R mean scores compared to the other group. There were no significant differences between the students' perspectives in two studied types of universities about professional values according to other demographic variables ($P > 0.05$) (*Table 4*).

## 5. Discussion

In the present study, no significant difference regarding the scores of professional values between the two groups of students was identified. Findings of the present study

suggest that all of the Iranian nursing students, whether graduating from type I or III universities contemplate professional values as important issues in nursing. According to the five-point Likert scale, total mean scores of students in type I and III universities corresponds to the statements of important to very important, respectively.

In general, our results are similar to the findings reported by previous studies (16, 17); however, nursing students in this study had lower NPVS-R mean scores compared to the students of other studies (2, 18). Despite the ranking of medical sciences universities in Iran into three types, these universities have probably educated their students in a somewhat similar manner about professional values. Similar to the current study, the statements "maintain confidentiality of patient", "maintain competency in area of practice", "seek additional education to update knowledge and skills", and "protect moral and legal rights of patients" were highly rated among subjects in previous

studies; meanwhile the "participate in peer review", "participate in public policy decisions affecting distribution of resources" and " participate in nursing research and/ or implement research findings appropriate to practice" statements obtained the lowest level of importance (2, 16, 18, 19).

In the study of nursing students' ideals in England, Maben et al (2007) reported that values among graduating nursing students are closely related to the patient care (20). Moreover, other studies have indicated that students would best perceive and integrate the values that are related to the patient care (2, 19, 21). Providing care for patients is the cornerstone of codes of ethics in nursing (22). The nurses are expected to provide care with a respectful competent behavior and without prejudice toward patients (23). Since patient care is a prominent part of nursing education, one would expect the values related to care to be rated as the most important professional values by students (2). As a matter of fact, it is well identified that nurses would highly count the values directly associated with clinical work and patient care as important (2); however, values not directly related to patient care such as participating in nursing associations and research activities did not possess such high level of importance. Reports have shown that appropriate educational curricula can improve students' views towards this group of values as well (16). In addition, each value possesses an emotional dimension (24). In this regard, if a value develops during the first or two stages of emotional learning, while it is not literally encouraged or practically approached during formal education, the importance of that value might be deserted by students (25). Furthermore, examination of the two groups of participants in terms of families' economic situation revealed significant differences in all of the NPVS-R statements. As previously described in literature, it is possible that good to moderate economic situation can lead to a more effective performance without any concerns towards the professional practice (26).

Several limitations in this study should be noted. Firstly, this study was conducted in a cross-sectional design, while the longitudinal follow-up of students would most likely provide a more correct picture of the educational development. A replication of this study could be useful with the same students in years after graduation to identify whether their professional values have changed or remained the same. Future studies should comprise nursing educators' competency and educational techniques in the area of professional values. Future studies are also required to identify how faculty role models, clinical staff and educational experiences may facilitate the development of professional values.

In conclusion, we showed that the educational ranking of medical science universities in Iran is not correlated with their students' perspective about professional values. Moreover, we showed that students who were on the verge of graduating and entering to independent field of nursing practice, obtained mean scores in the range of important to very important; however, such highly rated items were directly associated with nursing clinical work. Thereby, there is a pressing need toward disclosing the importance of non-clinical professional values such as evaluating and monitoring colleagues, participating in professional associations and research activities among nursing students. The main factors contributing to the development and learning of professional values are educators, students, faculty, clinical experience, presentations, patient care and personal values (23). Therefore, enhancing professional values in nursing students and transforming current students into future's empowered nurses who are able to undertake a wide range of activities, necessitates comprehensive development of educational schedules appropriate for the present conditions.

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