



Career Development of Nursing Preceptors in Iran: A Descriptive Study

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Abstract

Background: The career development of nursing preceptors is key to improving the quality of clinical education. However, there is a lack of sufficient and specific information about the career development of nursing preceptors in Iran.

Objectives: This study aimed to investigate the nursing preceptors' career development status.

Methods: A descriptive cross-sectional study was carried out with the participation of 92 nursing preceptors. Participants were selected by census sampling method from 5 hospitals in Tabriz, Iran. Demographic and 6-dimension career development questionnaires were used to collect data. The collected data were analyzed using SPSS version 22, and the significance level for all statistical tests was determined to be less than 0.05.

Results: Participants received the highest career development on ethical, cultural, and individual dimensions with mean scores of 3.55 ± 0.471 , 3.41 ± 0.525 , and 3.38 ± 0.540 , respectively. However, they obtained the lowest career development on the organizational, research, and educational dimensions with mean scores of 2.68 ± 0.580 , 2.28 ± 0.672 , and 2.20 ± 0.690 , respectively. Moreover, a comparison of career development based on demographic information showed that female preceptors, preceptors with more than 20 years of work experience, preceptors with master's degrees, and contract employees had the highest mean scores for career development.

Conclusions: Given the preceptors' cooperation with nursing faculty as clinical nursing educators and their role in nursing education, officials of nursing faculties should develop specific career development programs (especially in organizational, research, and educational dimensions) and establish an effective relationship between preceptors and professors to enhance nursing students education.

Keywords: Career Development, Clinical Education, Nursing Education, Nursing Student, Preceptor

1. Background

The career (professional) development of university professors and educators is key to improving the quality of higher education. In order for a university professor/educator to be successful in the fields of education, research, and service to the community, universities need to empower professors/educators by facilitating their professional development (1). Professional development is an institutional process that aims to improve a professor's knowledge, skills, attitudes, and behaviors to enhance their specialized knowledge, develop their teaching/learning process management, advance their research skills and capabilities, cultivate their ability to communicate with students, create a sense of attachment to the faculty, and contribute to their job satisfaction. Professional development ultimately results in a better learning experi-

ence for students and ever-increasing progress for professors/educators (2, 3).

Career (professional) development is also essential for educators in health care systems. Nevertheless, insufficient research has been conducted on this subject. Career development improves teaching methods, develops leadership skills, facilitates achievement of academic goals, and strengthens professional networking (4). Mirkamali et al. and Javanak Liavali et al. presented a professional development model for medical science departments in universities and proposed 6 dimensions of professional development that could help improve the quality of medical education. These include individual, educational, organizational, research, cultural, and ethical dimensions (1, 5). The career (professional) development of nursing professors/educators can also contribute to their progress in all of these 6 dimensions and enhance their leadership role in

dealing with students (6). The professional development of nursing professors and nursing educators can also improve care programs and the fruitful entry of health service providers into a country's public health and medical care system (7).

In recent years, the mutual learning-teaching relationship between nursing students (as learners) and experienced nurses (as preceptors or clinical educators) has gained importance. A nurse preceptor is a person with adequate competence and experience to take on the role of an educator in a clinical setting. Preceptors have an important role in assisting students with their acquisition of problem-solving skills and their attainment of higher capabilities. With this teaching method and the presence of these educators, nursing students feel that they are members of the team. This helps student nurses with their professional socialization and professional development. Moreover, this type of education improves students' self-confidence and their ability to provide high-quality nursing care. In order for nurse preceptors to be effective at this role, they should expand and develop their knowledge, clinical and scientific capabilities, and ability to build effective relationships with students (8, 9).

Preceptorship is a formal teaching and learning method in which an educator or an experienced nurse is paired with a senior student or new graduate nurse for a short period of time. However, individuals selected as nurse preceptors should have such characteristics as emotional stability, familiarity with modern teaching methods, and appropriate educational information to avoid ambiguity in education (10).

2. Objectives

As in many countries, preceptors have an important role in nursing students' clinical education in Iran. Nevertheless, we could not find specific information about the career development status of the nursing preceptors in Iran. Accordingly, this study aimed to investigate the career development of nursing preceptors in Tabriz, Iran.

3. Methods

This descriptive cross-sectional study was conducted from April to June 2022. The participants were nursing preceptors working at 5 teaching hospitals (Emam Reza, Shahid Madani, Sina, Alzahra, and Taleghani) in Tabriz, Iran. The inclusion criteria were being a clinical or adjunct educator of the faculty, having cooperated with the faculty for at least 1 year, and being willing to participate in the research. There were no specific exclusion criteria except for an unwillingness to continue the study.

The census method was used for sampling. The list of all 100 nurses (staff nurses, anesthesia nurses, and operating room nurses) who cooperated with the faculty as a preceptor was obtained from the academic affairs department of the faculty. After the research project was approved by the Research Ethics Committee of Tabriz University of Medical Sciences, the researcher visited the hospitals to brief participants on the research objective and procedure and then obtained their written informed consent. Research questionnaires were distributed among the participants and were collected after the participants completed them. Eight of the 100 preceptors were not willing to participate in the study, and hence the final sample size was 92.

The research tool consisted of 2 parts. The first part included a demographic questionnaire developed by the researcher based on the literature review and included the variables of age, work experience (year), academic discipline, academic degree, employment status, and gender. The second part was a 6-dimension career development questionnaire, which addressed individual, educational, research, organizational, ethical, and cultural dimensions (1). This questionnaire included 6 components comprising 36 items. The items were scored on a 5-point Likert scale anchored by "very little" (1), "little" (2), "moderate" (3), "much" (4), and "very much" (5). Scoring was done by obtaining the average score of all 36 items (minimum and maximum scores of 1 and 5, respectively). In each of these 6 components, the professional development of the participants was evaluated based on their mean scores as follows: 1 - 2.33 (low), 2.34 - 3.66 (moderate), and 3.67 - 5 (high) (1). Content validity and the reliability of this questionnaire were confirmed by Mirkamali et al. (1).

In the current study, content validity also was examined by asking 10 professors in the nursing faculty and 10 nurse preceptors to review the questionnaires. Based on their opinions, these questionnaires were suitable for assessing the professional development of nursing preceptors. The reliability of this questionnaire was checked using the internal consistency (Cronbach $\alpha = 0.94$).

The study was approved by the Ethics Committee of Tabriz University of Medical Sciences (IR.TBZMED.REC.1400.202). All participants completed the informed consent form and were assured that they would remain anonymous.

The statistical analysis of the data was performed in SPSS version 22 (SPSS Inc, Chicago, Ill, USA). The data were analyzed using frequency, percentage, mean, and SD. A 1-way analysis of variance (ANOVA) and *t*-test were conducted to determine the differences in categorical data between groups. Results with $P < 0.05$ were considered statistically significant.

4. Results

The mean age of the participants was 38.98 ± 3.05 years. The majority of the preceptors were female (90.22%) and had a bachelor's degree (85.86%). Table 1 presents the demographic information of the preceptors.

Table 1. Participants' Demographics (n = 92)

Variables	No. (%)
Age (y)	
20 - 30	13 (14.13)
31 - 40	43 (46.73)
> 40	36 (39.14)
Gender	
Male	9 (9.78)
Female	83 (90.22)
Employment status	
Contract	15 (16.30)
Official	77 (83.70)
Work experience (in year)	
< 10	86 (93.47)
10 - 20	4 (4.35)
> 20	2 (2.18)
Discipline	
Nursing	86 (93.47)
Operating room	1 (1.09)
Anesthesia	5 (5.44)

The total mean score for the career development of the participants was 2.92 ± 0.561 , indicating a moderate level of career development. However, the results showed that the participants received the highest mean scores on the ethical, cultural, and individual dimensions (3.55 ± 0.471 , 3.41 ± 0.525 , and 3.38 ± 0.540 , respectively), indicating a moderate level of professional development in these 3 dimensions. Moreover, they obtained the lowest mean scores on the organizational, research, and educational dimensions (2.68 ± 0.580 , 2.28 ± 0.672 , and 2.20 ± 0.690 , respectively), indicating a low-moderate professional development level in these dimensions. Therefore, the lowest and highest mean scores were for educational and ethical components, respectively.

Among the items on the questionnaire, the lowest mean score related to the organizational dimension, including item 23: "how much are you in contact with the faculty head/managers to achieve professional goals and obtain a definition of effective teaching?" with a mean score of 2.30. The highest mean score was related to the ethi-

cal dimension, including item 30: "how much do you take responsibility for your professional tasks?" with a mean score of 4.12.

Since the Kolmogorov-Smirnov test showed that the data distribution was normal, ANOVA and *t*-test were used to compare the mean scores. A comparison of professional development based on demographic information showed that the highest mean scores for professional development were those of female preceptors, preceptors with more than 20 years of work experience, preceptors with master's degrees, and contract employees (Tables 2 and 3).

5. Discussion

The present study was conducted to evaluate the career development of nursing preceptors in Tabriz, Iran. The results showed that the overall status of career development in the participants was at a moderate level. In the study by Mirkamali et al., the mean score for the professional development of the faculty members was at a moderate level, which is also consistent with the findings of the present research (1). Andrew studied long-term professional development among nurses and found that professional development was necessary for the nursing profession because it improved nurses' knowledge and skills and had a direct impact on the quality of their work. Professional development should be based on the identified needs of nurses, allowing nurses to pursue professional development activities during their work time, which is normalized within the medical institution (11).

In the current study, the participants received the highest scores in the ethical, cultural, and individual dimensions and the lowest scores in the organizational, research, and educational dimensions. Therefore, the lowest scores were for the educational dimension, and the highest scores were for the ethical dimension. The highest and lowest mean scores in the study by Mirkamali et al. were for ethical and organizational dimensions, respectively. In this study, the highest mean score was for the ethical dimension, followed by the individual, educational, research, cultural, and organizational dimensions (1), which is also consistent with the findings of the present research. Zahedi and Bazargan conducted a study to identify the professional development needs of faculty members and showed that the need for improving research and teaching skills had lower priority, whereas the need for improving communication skills had the top priority (12). However, in the current study, the research dimension received the lowest mean score after the educational dimension, suggesting that the greatest need for improvement is in the research and educational dimensions.

Table 2. The Relationship Between Demographic Characteristics with Career Development ^a

Career Development	Demographics								
	Male	Female	P-Value *	Contract	Official	P-Value *	MsN	BsN	P-Value *
Individual	3.03 ± 0.70	3.42 ± 0.51	0.921	3.60 ± 0.45	3.22 ± 0.54	0.028	3.59 ± 0.51	3.61 ± 0.65	0.483
Research	2.16 ± 0.86	2.21 ± 0.45	0.001	2.30 ± 0.41	2.25 ± 0.52	0.049	2.32 ± 0.48	2.52 ± 0.64	0.048
Educational	2.04 ± 0.44	2.00 ± 0.56	0.614	2.30 ± 0.59	2.28 ± 0.56	0.886	2.27 ± 0.54	2.17 ± 0.60	0.006
Organizational	2.25 ± 0.52	3.04 ± 0.56	0.035	2.55 ± 0.50	2.70 ± 0.56	0.049	2.80 ± 0.53	2.31 ± 0.66	0.283
Ethical	3.26 ± 0.50	3.60 ± 0.48	0.319	3.59 ± 0.35	3.33 ± 0.50	0.017	3.52 ± 0.49	3.64 ± 0.37	0.356
Cultural	3.23 ± 0.50	3.58 ± 0.52	0.049	3.60 ± 0.50	3.53 ± 0.52	0.375	3.43 ± 0.52	3.12 ± 0.50	0.042
Total	2.66 ± 0.68	2.97 ± 0.55	0.031	2.99 ± 0.48	2.88 ± 0.51	0.047	2.97 ± 0.51	2.86 ± 0.57	0.049

^a Values are expressed as mean ± SD. * t-test

Table 3. The Relationship Between Demographic Characteristics with Career Development ^a

Career Development	Demographics											
	Nursing	Operating Room	Anesthesia	P-Value **	Age			P-Value **	Experience			P-Value **
					20 - 30	31 - 40	> 40		< 10	10 - 20	> 20	
Individual	3.22 ± 0.54	3.70	3.70 ± 0.00	0.164	3.50 ± 0.46	3.10 ± 0.59	3.32 ± 0.47	0.184	3.10 ± 0.55	3.20 ± 0.47	3.70 ± 0.00	0.048
Research	2.30 ± 0.51	2.35	2.28 ± 0.44	0.937	2.30 ± 0.66	2.28 ± 0.47	2.25 ± 0.48	0.921	2.11 ± 0.49	2.31 ± 0.44	2.35 ± 0.40	0.050
Educational	2.10 ± 0.57	2.34	2.27 ± 0.44	0.919	2.29 ± 0.57	2.25 ± 0.48	2.23 ± 0.64	0.570	1.80 ± 0.60	2.10 ± 0.34	2.35 ± 0.70	0.049
Organizational	2.80 ± 0.56	2.35	3.00 ± 0.44	0.538	3.21 ± 0.74	2.50 ± 0.49	3.00 ± 0.55	0.917	2.40 ± 0.55	2.45 ± 0.57	2.98 ± 0.00	0.026
Ethical	3.25 ± 0.49	3.74	3.75 ± 0.00	0.559	3.62 ± 0.26	3.50 ± 0.60	3.60 ± 0.32	0.080	3.57 ± 0.51	3.61 ± 0.34	3.71 ± 0.00	0.035
Cultural	3.40 ± 0.52	3.70	3.55 ± 0.44	0.282	3.40 ± 0.51	3.28 ± 0.54	3.55 ± 0.48	0.089	3.00 ± 0.52	3.62 ± 0.40	3.17 ± 0.70	0.038
Total	2.85 ± 0.52	3.05	3.10 ± 0.44	0.590	3.05 ± 0.54	2.82 ± 0.51	3.00 ± 0.49	0.420	2.67 ± 0.53	2.88 ± 0.43	3.04 ± 0.32	0.039

^a Values are expressed as mean ± SD. ** ANOVA

Given the results, the ethical dimension in the present study received the highest mean score, indicating that it had the least need for improvement. According to item 30 on the questionnaire, it can be said that the preceptors understood the importance of professional development and were committed to their profession because the ethical dimension is associated with a sense of responsibility that nurses have toward their profession. The lowest score for preceptors was in the educational dimension. In other words, preceptors were not adequately adept at educational management and the use of clinical education methods. Acquainting preceptors with the principles of clinical teaching, new clinical education methods, and patient-centered teaching method can improve the education process and enhance students learning (13, 14).

As for the research dimension, it can be said that science production and research endeavors are the major tasks of universities, and thus obtaining a low score for this component suggests the necessity of focusing more on the development of research and its relevant skills, including up-to-date scientific publications, familiarity with evidence-based nursing and research rules, and involvement in national and international congresses. With proper training in search skills, nurses could get acquainted with the newest patient-centered and evidence-based care models (6). According to item 23 on the questionnaire and the lower score for the organizational di-

mension, managers should put more emphasis on supporting preceptors, practices of professional development facilitators, group activities and team-building activities, and the use of specialized nursing trainers.

The relationship between professional development and participants' demographics showed that contract employees, preceptors with more than 20 years of experience, preceptors with master's degrees, and females had the highest mean scores for professional development. The results of Adeniran et al. are consistent with the findings of the present study. They showed that the demographic characteristics of nurses (employment status, gender, and academic degree) were one of the main principles in their professional development and had a direct relationship with nurses' years of experience (15). Jafari et al. investigated the organizational and underlying factors in the professional development of teachers and showed that those with more work experience had a positive attitude toward their profession and emphasized the importance and necessity of professional development (16). The high score of contract preceptors for professional development can be explained by the fact that they were more motivated than the permanent staff to learn. Accordingly, because of their employment condition, contract staff members are more eager to learn and acquire knowledge and skill in their work by getting more involved in it and trying harder.

The results of investigating the participants' profes-

sional development based on their degree showed that preceptors with a higher terminal degree had greater professional development than those with a lower degree. This is consistent with the findings of Adeniran et al. (15). The more learning motivation in nurses with master's degrees could be mentioned as the main reason for this difference.

5.1. Conclusions

Given the preceptors' cooperation with nursing faculty as clinical nursing educators and their role in nursing education, officials of nursing faculties should develop specific career development programs (especially in organizational, research, and educational dimensions) and establish an effective relationship between preceptors and professors to enhance nursing students' education. The results of this study can also be used in the future planning of nursing student education for preceptors to have the right to participate in educational, research, and organizational programs and ultimately improve the quality of clinical education. The study has a limitation in that the number of participants was small.

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Footnotes

Authors' Contribution: Sajad Habibzadeh: Conceptualization; investigation; data curation; formal analysis; software. Hamidreza Haririan: Conceptualization; funding acquisition; methodology, supervision; writing the original draft. Hadi Hassankhani: Conceptualization; validation. Lydia Wytenbroek: Review and editing.

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Data Reproducibility: The data presented in this study are uploaded during submission and are openly available for readers upon request.

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Informed Consent: All participants completed the informed consent form and were assured that they would remain anonymous.

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