# **Original Article**



# Preparing career development model of Iranian nurses using Delphi technique

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## Abstract

**Introduction:** Nowadays, nurses play a key role in all health-care systems in the world. To improve the professional conditions and increase the quality of care, nurses' career development should be fulfilled in a specific and targeted way. The aim of this study was to investigate the factors affecting career development of nurses in Iran. **Method:** This prospective study was conducted using Delphi technique in three stages with the presence of 60 nurses and nursing faculty members. In the first round, four questions were used to assess the participants' perspective career development, how to evaluate it, its effective factors and suggestions to design a career development model. In the second and third rounds, to collect participants' opinion and create consensus, a researcher-made questionnaire based on the results obtained during the first round was used. **Results:** According to the results, 25 effective factors were extracted and classified into 6 categories of professional development, increasing organizational influence, individual development, specialization, improvement of career dignity, and psychological acceptance. The nurses' career development model was also developed and validated with the results. **Conclusion:** According to the obtained results, it can be concluded that career development in the nursing area is achieved by realizing six factors of professional development, specialization, increasing organizational influence, individual development, psychological acceptance, improvement of career dignity, and psychological acceptance dignity, and psychological acceptance dignity, and psychological acceptance dignity, and psychological acceptance dignity, and psychological acceptance.

Keywords: Career evolution, Delphi technique, nursing

## Introduction

Today's employees think and worry about their working lives more than ever, they want a reliable, long-term, satisfying career, and strive to progress in their profession.<sup>[1]</sup>

In nursing organizations such as hospitals, which make up the largest part of the staff, nurses' productivity is a very important issue because hospitals are places to provide care for patients who have multiple complex needs and nurses form a major source of health care.<sup>[2]</sup> Improving the quality of working life of nurses by nurse and hospital managers enhances their job satisfaction. Quality of working life has an important role on

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employee behavioral responses such as organizational identity, job satisfaction, work involvement, work effort, job performance, turnover intention, and organizational changes.<sup>[3]</sup> One of the main ways to improve the quality of working life is through changes in organizing career such as the development of the career path; career path development is a process that is realized by career plans and through a series of practical steps. Each of these steps is determined by a set of evolutionary tasks, activities, and relationships.<sup>[4]</sup>

According to Shane's theory, career choices are influenced by the development and stabilization of career anchors. Accordingly, despite being faced with difficult choices and job conditions, a person will not be discouraged and exhausted if they are in line with his career anchor. There are other researches on career designing, such as Roger.<sup>[5]</sup> However, Shane's theory seems to be the bases for the extension of all models by examining the above-mentioned career

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	Table 1: Indices and codes extracted from the first question in the first and the second rounds				
	Question 1: W	What does career development mean to you?	The agreed code in	Codes rejected in the	Considerations
Row	Main index	Codes extracted from the first round	the second round	second round	
1	Professional development	Job enrichment, Role development, Wage enhancement, Specialization over time, Entering special sections over time, Increasing awareness of professional status, Reducing professional errors, Increasing performance	Code 6	Code 2 Wage enhancement Reducing professional errors	
2	Psychological acceptance	Increased responsibility - increased self-satisfaction - increased job satisfaction-increased quality of working life - increased motivation over the years	Code 5	No rejection	
3	Increasing organizational influence	Climbing career ladder, better position in terms of benefits over the years, Role-playing at higher levels, Role playing in other areas of nursing such as community health or mental health, Vertical career enhancement, organizational authority	Code 3	Role-playing at higher levels, Role playing in other areas of nursing such as community health or mental health	The two rejected codes in the role development should be merged
4	Individual development	Advancement in clinical and theoretical knowledge, acquiring more knowledge, increased personalized knowledge-based activities over time, evolving individual experience, enhancing opportunities for further development	Code 4	No rejection	
5	Improvement of career dignity	Attracting manager's attention- Restoration of professional identity over time - Increased job security - Professional independence with increasing age - Reduced workload over the years - Increased job credit over time	Code 4	Restoration of professional identity over time Increased job credit over time	
6	Specialization	Employee career guidance, Professional ethics-based performance, individual's Up-to-date professional knowledge, professionalization, tangible career progression from one's own and others' point of view	Code 4	Professionalization	

# Table 2: Indices and codes extracted from the second question in the first and the second rounds

Question 2: How do you assess nursing occupations in terms The agreed code in the second round Codes rejected in the second round of career development?

Row	Main index	Code		
1	Professional influence	Very poor- lack of attention on the part of authorities - lack of specific professional indices	3	0
2	Ambiguous future	Lack of hope for the future among nurses	1	0
3	Organizational structure	In terms of organizational structure, there is no specific place for promotion There are some roles and responsibilities for nurses imposed on them as a routine Doctor-orientation in hospitals prevent any kind of nursing career development The existing rules are insufficient for career development in nursing profession	4	0
4	Capabilities	There are laws for development but they are not enough	0	This code was deleted as a repeated item
5	Relying on professional performance	Nurses are not aware of their rights and duties. Some nurses do not have enough knowledge. Individual's professional understanding is different over the years.	3	0
6	The role of the media	Nurses are constantly being judged by the media	1	0

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models. The career promotion path is designed to motivate and maintain staff value, which, in addition to grant awards, motivates them and provides them with an opportunity to gain more skills and knowledge.<sup>[6]</sup> Career development in the nursing profession and in the career path allows them to respond to their daily needs in political, social, professional, and scientific domains and result in meeting health and care requirements of individuals.<sup>[7]</sup> The process of nursing career development should conduct them from the traditional and existing paths to new care providing strategies.<sup>[5]</sup> In recent years, many hospitals have attempted to increase the quantitative and qualitative dimensions of work force productivity in order to effectively manage and maintain their survival in a competitive environment with lack of resources because productivity is one of the factors that determines the sustainability and survival of organizations.<sup>[8]</sup> Since there is no evidence of a pattern of career development in Iran, the purpose of this study is to develop a model for the career development for nurses in Iran so that they could take the path of career development, recognize effective factors and career anchors of nurses' working life and apply them in the best manner.

## **Materials and Methods**

This study was conducted to provide a career development model among nurses in Iran using Delphi technique.

- In the first round, after conducting studies and collecting information on the subject matter, providing documentation and forming a team of Delphi experts consisting of a researcher, supervisor and advisor the first stage questions including four open ended questions were prepared. The first round questions were:
  - 1- What does the career development mean from your point of view?
  - 2- How do you assess nursing occupations in terms of career development?
  - 3- What are factors affecting the career development of nurses?
  - 4- What are your suggestions for developing a career development model for nurses?

Question 3- What are factors affecting the career development of nurses?		0	The agreed code in the second round	Codes rejected in the second round	
Row	Main index	Codes extracted from the first round			
1	Individual features	Increased self-awareness, increased personal capabilities, gaining social status, lack of fear of gaining new positions, improved self-awareness, increased self-esteem, increased vitality and interest	7	0	
2	Rules and regulations	Organization of professional licensing, Adoption and improvement of pension and insurance policies, lack of non-professional assignments, Enforcement of the law on tariffs for nursing services, Meritocracy in assignments	5	0	
3	Scientific development	Updating the nurses' knowledge requirements Developing home and wound nursing Being multi-skilled nurses	3	0	
4	Professional infrastructure	Hierarchy commitment, Frequent notification and evaluation of specified tasks	2	0	
5	Employment	The need to conduct frequent job counseling at the hospital, identification of active students who are interested in key roles after employment	2	0	
6	Professional interactions	Formation of active and dynamic nursing associations - acquisition of professional skills	2	0	
7	Wages and Payments	Timely payment of salaries and benefits - sufficient wages	2	0	
8	continuous education	Repeated assessment of educational needs - Frequent evaluation of staff knowledge and skills	2	0	
9	delegation of authority	Lack of courageous managers, Clinical literacy and management of nurses, providing professional responsibilities to nurses, assigning more decision-making power to nursing office management, assigning research responsibilities to nurses who are interested and qualified	5	1 The code " Lack of courageous managers" was removed	

Table 3: Indices and codes extracted from the third question in the first and the second rounds

The qualifications to select participants to participate in the study were then determined. Participants' qualifications included having a minimum of 5 years of clinical work experience in a hospital and having undergraduate and higher educations. According to the specified criteria, finally, 60 people were selected with targeted and non-random sampling.

- After obtaining the code from the Ethics Committee of the University's Research, a telephone call was made with the selected participants regarding the purpose of the study and the methodology. Then, with the permission of the participants, they received questions through e-mail, interviews and telephone contacts. Forty-eight out of 60 selected participants were willing to answer questions and 48 forms were received. The 48 received questionnaires were considered as the satisfaction criterion to participate in the study. After collecting written responses and transcribing audio files, the researcher gathered the initial information.
- Content analysis was conducted on the collected data and 96 codes were classified in 29 main indices. After extracting and categorizing the main concepts in the second phase of Delphi technique, a questionnaire containing the main concepts was extracted using the Likert scale (totally agree-totally disagree) and presented to the participants. Forty-eight questionnaires were submitted to the participants out of which 25 forms were received. The response factor was calculated as 52%.
- After receiving responses from the participants, the questionnaires were examined and according to previous studies.<sup>[9]</sup> In each item, the 70% agreement was set as the acceptance criterion and 70% disagreement was set as the rejection criterion. The values of less than 70% (for agreement or disagreement) were set as the criterion to repeat survey; accordingly, all the codes were approved by the participants.

 After the final compilation using the obtained codes and indicators, the primary model was formulated and in the third round, presented to 25 participants for survey, comments and suggestions were collected and the analysis was conducted. Finally, after applying the comments and suggestions, the final model of effective and determinant factors of the career development model was formulated [Figure 1].

## Results

Results of the first to the third rounds of the study are included in sections 1 to 4. The results of the first round of the study were obtained in 96 codes and 29 main indices in response to four-item questions. The 96 results obtained in the second phase of the study were re-evaluated by participants that 88 of them were approved by the participants. The codes that were surveyed and approved by the participants are listed in Tables 1-4.

After the finalization and consensus of the participants in the third stage, the nurses' career development model developed based on the answers to the first question. This model was made available to experts and finalized after some modifications.

## Discussion

The results of this study led to the identification of 88 items classified into 28 main branches. The results showed that a total of 24 items affect the nurses' career development, which were classified into six factors of six factors of professional development, specialization, increasing organizational influence, individual development, psychological acceptance, improvement of career dignity, and psychological acceptance. Based on the identified factors, nurses' career development model was

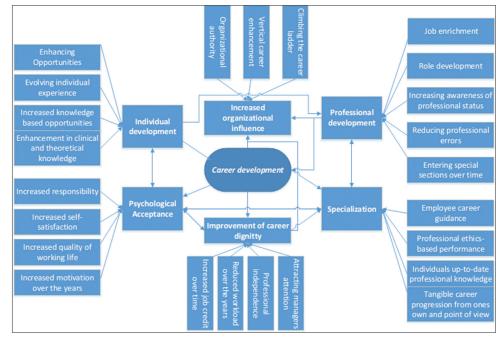


Figure 1: Career development model

	career development model for nurses?			
Row	Main index	Codes		
1	Financial issues	Tariff law enforcement - Significant increase in wages and bonuses with increasing age	2	0
2	Participatory Management	Participation of nurses along with head nurses in hospital macro decisions	1	0
3	Job counseling	Continuous job counseling over the years of service, legal requirement of the need for job counseling for nurses	2	0
4	Emphasis on professional care	Continuing education and standardization - focusing on professional behavior and treatment in the hospital	2	0
5	Professional independence	Granting professional qualifications to nurses, implementing international examinations such as the RN exam, creating career enrichment as a basis for professional independence, clarifying the main responsibilities of nurses to identify additional responsibilities for nurses in departments	4	0
6	Professional development of nurses	Providing nurses with continuous education - Emphasizing nurses training and rankings	2	0
7	Professional interactions	Increasing the level of managers' interaction with nurses and not solely the head nurses; Increasing the role of the nursing system in improving nurses' professional status	2	0
8	Environmental conditions	Increasing welfare conditions for nurses, Paying attention to the health of nurses and developing the possibility of periodic examinations for nurses, Nurses' full protection against any physical and verbal abuse, Maintaining their care and respecting nurses at service - Legal attention to the hierarchy in the hospital departments	5	0

 Table 4: Indices and codes extracted from the fourth question in the first and the second rounds

 1- Fourth question: What are your suggestions for developing a The agreed code in the second round Codes rejected in the second round

prepared. According to the model, career development is achieved through realizing six factors of professional development, specialization, increasing organizational influence, individual development, psychological acceptance, improvement of career dignity, and psychological acceptance. Another important factor in the nursing career development is the psychological acceptance that is achieved when a nurse has self and career satisfaction and achieves quality of working life.

In developing the document, continuing education was of great importance because this code was approved several times. The results of this study are consistent with Perica *et al.*<sup>[4]</sup> and Nikala Lane.<sup>[10]</sup> They concluded that pre and post-employment training was one of the factors influencing the career selection development by nurses.

The next finding, which was confirmed, was the improvement of working conditions and improvement of nurses with age to improve their career development path, which is consistent with Darvishi *et al.*<sup>[8]</sup>

Based on the results of the study and viewpoint of participants, nurses have low professional skills in the hospital and they are not taken into consideration by the authorities at the higher levels of management. Job promotion occurs accidentally and there is no specific measure for growth in the hospital, which is why there is no hope for a career future.<sup>[11]</sup> However, this study results showed that professional development, increasing organizational influence, individual development, specialization, improving career dignity and psychological acceptance have the greatest impact on the career development model according to nurses.

In the results of the study, independence over the years also has been discussed; Nazli (2007) emphasize that in formulating human resource strategy, it is necessary to provide the work force with freedom and independence to achieve commitment, professional development, innovation and organizational learning.<sup>[11]</sup>

This aim can be achieved with creating career enrichment for nurses. In career enrichment for nurses, success, recognition, accountability, growth, and perfection of nursing careers should

be met. That is, nursing career should be rich, meaningful, autonomous, and dominant and have access to the prerequisite for growth and creativity.

The other result of the study is the effect of increasing the quality of working life on the psychological acceptance and the effect of the psychological acceptance on the career development process considered by the participants in the study. Increasing the quality of working life is effective in employee's perception of the profession, professional acceptance and career development, which is consistent with Bozionelos.<sup>[12]</sup> The results showed that job promotion opportunities by the nurses, evolving individual experience, increased personalized knowledge-based activities and advancement in clinical and theoretical knowledge are effective in their personal development and personal development is an important factor for career development of nurses, which is consistent with the results of Serap Nazli (2007).<sup>[11]</sup>

Another finding of the study is that nurses in hospitals gain power and organizational influence by climbing career ladder, gaining vertical career enhancement and enhancing organizational authority, which is one of the important components of career development in them.

## Conclusion

Regarding the results of this study and identifying the factors affecting nurses' career development, the discussion of specialization, professional development and increasing organizational power and influence of nurses are important factors in the path of career development, which should be considered in policy making and planning.

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## **Conflicts of interest**

There are no conflicts of interest.

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