





## ***Factors Influencing Job Promotion in Iranian Nursing Profession, Barriers and Facilitators***

Mirmohammadi F<sup>1</sup>, Shah Hoseini M<sup>2\*</sup>, Yazdani H<sup>3</sup>, Ebadi A<sup>4</sup>

<sup>1</sup>BSc in Midwifery & MSc in Human Resource Management, Director of Fatima Midwifery Services & Counseling Clinic, Tehran, Iran

<sup>2</sup>Associate Professor, Department of Marketing, Faculty of Management, University of Tehran, Tehran, Iran

<sup>3</sup>Assistant Professor, Department Of Business Management, Faculty Of Management And Accounting, Farabi Collage, University Of Tehran, Tehran, Iran

<sup>4</sup>Professor of Nursing, Nursing Faculty, Behavioral Sciences Research Center, Life Style, Baqiyatallah University of Medical Sciences, Tehran, Iran

**\*Corresponding Author:** Associate Professor, Department of MBA, Faculty of Management, University of Tehran, Tehran, Iran

**Email:** Shahhoseini@ut.a.ir

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### **Abstract**

**Background:** Job promotion is one of the most important issues in nursing profession.

**Objectives:** Although, it is more than one hundred years since the beginning of modern nursing education in Iran, numerous challenges still exist in professional promotion of clinical nurses. Barriers and facilitators of job promotion are important factors that should be considered for the individual development of nurses and efficiency increase of healthcare organizations. This study aims to identify and present factors influencing, barriers and facilitators of nursing job promotion in Iran.

**Methods:** This qualitative study was conducted in 2017 using individual semi-structured interviews with twenty-two experts in health and nursing management. The data were analyzed using content analysis based on Graneheim and Lundman method. The main questions of the interview included the following: “How is nursing job promotion done in your organization?” and “What are the barriers and facilitators of job promotion for nurses?”

**Results:** The findings were categorized into six themes and ten categories. Facilitators for job promotion among nurses included: development of an atmosphere for mutual growth and excellence, lifelong training program, exploring professional identity in healthcare team & society and fair compensation for the services, salaries and benefits. Meanwhile, wrong cultural beliefs and barriers, ineffectiveness organizational regulations were some barriers of nursing job promotion.

**Conclusion:** Nurses’ motivation is fluctuating due to empowering factors and barriers. Health systems certainly can institutionalize and perform nursing job promotion solutions through short and long-term planning on job promotion (such as compensation for the services, encouragement for nurses, organizational culture improvement, atmosphere change in society and organizational).

**Keywords:** *motivation, job satisfaction, nurses, Iran*

### **Introduction**

Healthcare organizations are fundamentals of the health system and play an effective role in the promotion of societies. The formation of these organizations is based on the human resources [1-3]. During the recent decades, health organizations, in order to achieve their organizational goals, have required capable human resources that nurses are counted as one of the largest and most important part of them [4].

Compared to job satisfaction that does not have a direct impact on job burnout, the work environment in healthcare organizations influences the nurses’ professional development [5]. Nursing profession requires high emotions; however, this can lead to high stress and mental exhaustion. Professional capability is directly related to the development of nursing job path [6,7].

Providing promotional opportunities in a suitable job path structure are an important instrument for creating job satisfaction, retention and organizational commitment of employees [8]. In this regard, there are various models such as carrier management training, approval of in-service training courses for the nurses, performing themes such as job ladders [9], application of competency models [10], Vincent's Hospital Model for the professional functioning of nurses [11], Portuguese Professional Development Model for Nurses [12].

However, studies indicate several factors in the slow growth of nursing profession development, such as work fatigue, disregard for independence in decision making [13,14] ignorance of the organizational power in the profession [15]; such factors can lead to the provision of low quality healthcare services to the patients [16], job leaving [17], immigration phenomenon among nursing [18] and shortage of nurses which is one of the main concerns of industrialized and developing countries [19].

About nursing in health system structure in Iran we can say the oldest medicine and nursing course in Iran dates back to Arian era. The first nursing school was established in Uremia in 1916; and one year later, modern scientific nursing with four graduates in nursing started to function and from 1920 to 1950, other nursing schools in different cities were established. Currently, according to statistics of the Nursing Organization and the Ministry of Health, in Iran, there are more than 170 thousand nurses working in the public and private sectors in different health care fields [20]. During the past three decades, great attempts have been done to improve job development of this field. The first program of nurses job development in Iran was done in 2003 by the Ministry of Health with the purposes of increasing motivation and efficiency in nurses based on performance evaluation strategies [21]. Development of professional associations and ratification of civil laws in Iran's parliament has been some serious actions in this regard. The establishment of nursing organization in 2004 and the involvement of nursing in policy making through the establishment of nursing deputy in Iran's ministry of health in 2012 are two advancements during the last two decades [22]. However, the ratified laws on nursing professional promotion have not

been operationalized yet and this profession is regarded as same as the others. The aim of this study was to investigate factors influencing job promotion in the Iranian nursing profession.

### **Methods**

This qualitative study was conducted in 2017 using contractual content analysis through individual semi-structured interviews, conducted by an interviewer (first author), with 22 persons, including health and nursing managers, clinical nurses, nursing students, policy makers, faculty members of nine universities and three nursing faculties, members of nursing associations' boards and the health minister's consultants. The method proposed by Graneheim and Lundman [23] was used in the data analysis as below:

1. Transcribing the whole interview as soon as it finishes.
2. Reading the whole text to understand its content.
3. Determining meaning units & preliminary codes
4. Categorizing the similar preliminary codes into more comprehensive categories
5. Determining the main themes of the categories

### **Participants:**

Using a purposeful sampling to include selected samples with the highest level of information on the study question [24], we used the method proposed by Fontanel BJB and colleagues [25]. The participants widely ranged from both male and female nurses, with different years of occupational experience and education in different positions and various perspectives. They included head nurses, supervisors, and matrons. (directors of nursing office), hospital administrators, nursing experts as consultants in the ministry of health, members of the nursing organization boards and nursing associations, nurses working in Tehran University of Medical Sciences. The interviews were conducted with no age and gender limitation and clinical job experience was the inclusion criteria for the study.

**Ethical Issues:**

The time and place of the interviews were coordinated with the participants. The objectives of the study were explained to the participants before interviews and a voluntary written consent was obtained from the participants.

**Interview Design:**

The interview is conducted to extract experts' knowledge (these who were willing to share their knowledge & experience). The interviews were done with the interviewees' consent and the interviewer, as an expert in this field, was familiar with the field and paid attention to the details and important and hidden points of the interviews. The interviews were recorded and transcribed on the same day or week and were used as the main data of the study. Interviews were conducted in a friendly and respectful atmosphere, depending on the interviewees' tolerance, interest and working conditions. Each person was interviewed either once or twice and each session lasted from thirty minutes to three hours. The interviews were started with introducing the interviewer and asking personal characteristics (age, educational level, job experience, previous and current organizational positions and job shift); then five main questions were asked as follows:

1. How is nursing job promotion done in your organization?

2. What is the aim of nurses' job promotion?
3. What are the barriers and facilitators of job promotion for nurses?
4. What are the indicators for nursing job promotion? What is the main indicator?
5. How should these indicators be measured?

**Data analysis:**

The interviews were first typed and then coded and grouped. After grouping, there was a logical relationship between the data for which MaxQDA software was used. For data rigor, the immersed data were repeatedly referred to and necessary corrections were made in coding. Peer check was also used, so that the implemented texts and the extracted codes were shared with other colleagues and their comments were reviewed and applied in the results [22].

**Results**

A total of 22 nurses interviewed were from nine general hospitals, three nursing and midwifery faculties and headquarters, board members and consultants of the minister of health and nursing students. In the current study, qualitative data analysis was done in six main themes, ten categories and twenty-three sub-categories. The participants pointed out the two main general axes including facilitators (leading to the increase in motivation and job promotion) (Table 1)

**Table 1: Job promotion facilitators**

Theme	Category	Sub – category
<b>Development of an atmosphere for mutual growth and excellence</b>	Individual attempt for growth & excellence	1. Individual promotion 2. Social & emotional maturation 3. Job- life quality improvement
	Organizational grounding for growth & excellence	1. Organizational promotion 2. Extra organizational promotion , exploring job positioning
<b>Life – long training program</b>	Professional nurse training	1. Individual multiple skills 2. Recognition of capabilities & competencies by healthcare team
	Continuous training planning	1. Academic promotion 2. Education promotion according to the field/ study opportunities
<b>Exploring professional identity in healthcare team &amp; society</b>	Earning respect from healthcare team	1. Exploring professional identity 2. Job independence
	Correction of managers' perspectives towards the profession	1. Attention to nurses and nursing job promotional process 2. Understanding & exploring the sensitivity & vitality of nurses job in provision of healthcare services 3. Changing the physician – centeredness mindset
<b>Compensation for services, salaries &amp; benefits</b>	Transparency in payment level & benefits in professional levels	1. Considerable difference in the payments of night-shift nurses 2. Attention to monetary motivating factors
	Tariffing in nursing services	1. Special attention to clinical staff in payments & benefits 2. Benefits payment per professional performance and merit-based payment for nurses

and barriers (their presence hinders job promotion) (Table 2).

**Table 2: Job promotion Barriers**

Theme	Category	sub- categories
<b>Wrong cultural beliefs and barriers</b>	Improper image of nurses in cultural background & society	1. Improper culture building towards nursing profession. 2. Wrong and uninformed media performance 3. Misconception of the profession in providing care services
<b>Ineffective organizational regulations</b>	Ineffectiveness of organizational regulations in creating motivation	1. Modification of supportive laws 2. Consideration clinical experiences as educational equivalents

## Facilitators

### 1. Development of an atmosphere for mutual growth and excellence

This main category is based on the participants' perspective on facilitators for the job promotion. It refers to the individual and organization independent attempt and the mutual grounding of each of them for the growth of the other; this category has two sub-categories: individual attempt for growth and excellence, organizations grounding for growth and excellence that as a facilitator influences job promotion.

In this regard, one of the participants pointed as below:

"Individual promotion, brand and organizational profit can change the path of the organization. When you come across a team by which your experiences and independence grow, the organization's support for individual's achievements lead to values. These spiritual values and are above job promotion."(Participant no.2, female, 54 years old, hospital head)

The participants emphasized that individual development, emotional and social maturity can be regarded as an indicator for individual growth and as a motivator for job promotion.

"I have no emotional maturity, meaning that I haven't grown up yet, in a sense that I should work for my society. I am not only responsible for myself. This is the key point. If I think so, everything is in order and I am not counting the minutes to leave the office. Physicians and nurses, themselves, do not know how to communicate with each other."(Participant no.7, female, 52 years old, hospital matron)

Organizational grounding for growth and excellence which encompasses two sub-categories of organizational promotion and extra organizational promotion and clarification of job positioning claims that for an organization to stand threats and use existing opportunities there is a need for efficient staff.

"...The fact that the nurse does not feel stopped and unchanging and prospects to get a better position, we create professional motivation for the person and more attempt at doing duties. The main caregiving is with the nurses, the physicians trust them, give them responsibilities, use their experiences, and even in their patients' visits, nurses give some suggestions that physicians accept and nurses get job satisfaction."(Participant no.8, female, 34 years old, educational supervisor)

"...The system should be able to create for clarification, a clear route with specific criteria so that the person knows, as an example, that he can be promoted after five years and he can move to the next promotion level if he achieves some qualifications."(Participant no.22, female, 50 years old, hospital matron)

### 2. Life – long training program

According to the participants' perspectives, life – long training program is considered as a facilitator and influencing factor for job promotion. It consists of two sub-categories of educating professional nurses and planning for life-long training.

"Decrease in the quality of nursing units is because of incorrect patterns related to instructors and education" (participant no. 10 , female , 54 years old , clinical coach)

In the category of educating professional nurses, participants mentioned two sub – categories of individual multiple skills and the recognition of capabilities and competencies of healthcare team.

“A knowledge-based organization creates different aspects of knowledge and skill increase and attitude change. All of these influences positively on my job and promote organizational culture and atmosphere, as a result, in whatever team I work, the outcome will be all positive” ( participant no. 2 , female , 54 years old , hospital head)

Continuous training plan is another category consisting of two sub-categories of academic promotion and educational promotion related to as the field and study opportunities.

“The more educated the human resources are, the more growth will the organization enjoy, which crystallizes in a public behavior in the organization and the results in the achievement of organizational aims.” (Participant no.14, female, 39 years old, supervisor)

### **3- Exploring professional identity in healthcare team**

Within this main category, two sub-categories were mentioned including: professional identity and improvement in managers' perspectives towards the profession. Earning respect in healthcare team and independence at work were mentioned as subcategories of professional identity.

“It is the physician who is the boss from the point of view of healthcare team. Ok, no problem. However, a nurse does specialized task as well. The system is physician – cantered, because all evaluations and decision-making are done by them. Not only they do not psychologically support the nurses, but they also challenge them due to their higher level of knowledge and destroy their self – confidence. They ignore the fact that it is all a team work.” (Participant no 15, male 50, educational supervisor)

### **4. Compensation for the services**

According to the participants, compensation for the services through correcting the payment

system is a key factor in job promotion. Two sub-categories of this category included transparency of salaries and benefits at all job levels and nursing services tariffing.

“Salary and bonuses increase in accordance with social conditions can be effective. When an organization pays reasonably to the employee it needs, and the job can meet daily needs of the person, motivation & commitment will increase.” (Participant no 4, male, 50 years old, nurse)

### **Barrier**

#### **1. Wrong cultural beliefs and barriers**

Defaced social image and ineffective organizational regulations were mentioned as barriers of job promotion in the current study.

Improper culture building towards nursing profession, wrong and uninformed media performance, misunderstanding of the nursing profession in delivering healthcare services were sub-categories mentioned by the participants as factors influencing the defaced social image.

“It seems that stewards are the main barriers. They perceive nurses as staff in a lower and weaker position, even worse. Old physicians still regard nurses as rudimentary caregivers. If doctor despises a nurse, the organization should follow the case and reprimand the doctor, it is the time when a nurse feels his job value. Doubtless to say, the media functions for the physicians” (participant no.19, female, 45, supervisor)

#### **2. Ineffective organizational regulations:**

Participants regarded the ineffective organizational regulations as a barrier for transparency in job promotion path.

“We must have ratified rules, the decision makers are physicians, they don't see nurses as key staff; they should not consider nurses as sub-staff. (Participant no. 17, female, 52 matron) Regarding this category, as solutions for motivating nurses in job promotion path the participants suggested the modification of supportive laws and the equalization of clinical experiences as educational equivalents.



“The system should be able to create transparency, a clear job promotion path with specific criteria, so that the nurse be confident that if he can gain some qualifications, for example every five year, he can be promoted to the next job promotional level” ( participant, no. 22 , female, 50, matron)

### **Discussion**

This study explored facilitators and barriers of job promotion in clinical nursing. Job promotion planning is an important factor in enhancing staff and shows that internal organizational planning can help the organization through a standardized orientation and evaluation process [26].] Nurses, as the key elements of health systems, complain the nature of their job, organizational and extra-organizational ignorance. They have no sense of growth and progress in their profession. Herzberg regards these two factors as two motivating ones [27].

The results of our study showed that the development of an atmosphere for mutual growth and excellence, as a job promotion facilitator, emphasize the two dimensions of individual and organizational promotion. It encourages managers to consider the growth and excellence of staff in line with the organization for organizational planning.

Paying attention to the above – mentioned topics can be a key factor in promotion of health, perspectives and social values. Achieving individual indicators (attempt for self-knowledge and self-awareness) and organizational indicators (improvement in professional communications between staff and managers) can qualitatively and quantitatively approve the effectiveness of job promotion programs with the purposes of achieving individual and organizational goals [28]. The psychological perspective is centered on individuals and regards job promotion path as a mental and intrapersonal concept.

The findings of a study conducted by Coutinho regarding The psychology of working shown that managers’ attention to the changing dimensions of professional development (such as frequent changes based on individual differences and job environment) can influence individual development and create attractiveness for the nurses through accepting more responsibility by

staff to directing them towards psychological success[29]. Because such approach emphasizes self-directedness in job promotion in which individuals are led by personal values [30]; due to the constant changes, the work environment should be balanced [31]. As a consequence, the organizations role in professional promotion path systems [32] requires them to have tendency for the capable work force for a successful competition [33].

Nurses are expected to acquire various skills such as interpersonal skills that are important for the promotion at management level. Consistent with our findings, there are also some studies such as Adeniran [4] and Bibb [34] reported special skills are required to function properly in the management positions.

Lifelong training program, as a facilitator in nurses’ job promotion, was another finding of this study. Attitude, knowledge and developed skills, during the time, are important aspects of individuals’ life and their continuous attempt to achieve of their own goals [35]. Health care organizations help to improve organizational efficiency through providing promotion opportunities for their staffs based on changes in technologies , knowledge and staffs’ expectations [4]. In order to provide higher-quality services, these organizations try to provide promotion opportunities for their staff [36].

Training planning for effective nursing role in health systems in future and related changes in training programs according to the professional needs of nurses should be considered. Nurses’ training is based on basic learning and individual experiences; and there is no application of the results of the recent studies in clinical departments [37]. There is significant relationship between job development and training–developmental activities, consequently, they should be conducted at least in a part of training programs of the organization [38]. World Health Organization (WHO) strategies (2001) reinforced worldwide standards for nurses’ training and emphasized the importance of nurses and midwives’ studies based on documentations along with qualifications taken from clinical nursing and midwifery. WHO describes the nursing professional competency as a framework that reflects skills such as knowledge, attitude and

social, psychological and psychomotor elements [39].

Exploring professional identity in healthcare team and society was another result of this study as a facilitator of job promotion. Nurses' professional identity is strengthened and stabilized by time and in communications with healthcare team in which the nurses work. In fact, a part of socialization process is realized. Unclear and unacceptable image of nursing profession in the society affects professional identity of nurses. The Image of nursing profession perceived by society and culture may influence the formation of attitudes towards the profession, self-concept and the acquisition of professional identity [40, 41]. This study emphasizes that modification of thinking in managers, policy makers and nurses as key stakeholders should be considered in order to reach a clear definition of the promotion and to explore the position and professional and social identity of nurses in healthcare team.

In this study, the category of services compensation is one of the facilitators of job promotion. Compensation for the services is a wide concept encompassing the process of designing payment systems, remuneration systems, job classification and evaluation and setting payment tables. Basic salaries of clinical specialists and physicians are more important. Creating a services compensation model for the physicians based on value-based standard to improve motivational behaviors still remains a challenge for health care facilitation [42].

Wrong cultural beliefs and barriers is an impediment for job promotion. Although Florence Nightingale regarded nursing profession as an independent and not under the control of the physicians, nursing has long been seen as an integral part of medicine profession; nurses have always been aware of being under control of medical profession and are still experiencing high level of dissatisfaction in their professional position. In order to improve the public image and achieve a better position, nurses in healthcare organizations need to be seen more and they should represent themselves to the public for management, training, professional and clinical specialist positions and any other positions encompassing real nursing profession [43]. In the study conducted by Aiken et al. have shown that physician-centeredness with the idea of being a

subordinate of physicians are some of the factors affecting nurses' independence, job satisfaction, professional identity and resulting in decreased quality in healthcare services to patients [44].

Attention to the correction of nurses' defaced social image as key employees of health system in provision of health care services to the society and internal customers of the organization can be some of the factors leading to positive perspective towards job promotion in nurses.

In this study, ineffective regulations and improper organizational structure are barriers for job promotion path. Lack of clarity in laws and regulations cause decreased attractiveness, security and Job justice.

Reasons for the job continuation in nurses include the collaboration and support of leaders regardless of their role, encouraging and creating critical thinking, participating in patient care decision making. Nursing managers may open political doors and create a convenient atmosphere; Positive, honest and open communications are established and feedbacks are constantly received for solutions, and the nurse is valuable as a person who is directly in touch with the patient. The leaders try to provide resources required by the nurses in order to provide excellent health care services to patients [45].

Stability in laws and regulations and the consideration of staff conditions help them to better understand justice [46]. This study shows that protective laws, equalization of clinical experience with educational records, modification and exploration of effective laws can create motivation as a facilitator in nurses' job promotion.

There were some limitations to the present study. Like other qualitative studies, researchers' beliefs might have influenced the process of study. Also, it is possible that the interviewees' views have not covered all the factors, so the interviews were continued until data saturation in order to eliminate this limitation.

## Conclusion

According to this study, the nurses themselves play a key role for job promotion. However, health systems certainly can institutionalize and perform nursing job promotion solutions through short and long-term planning on job promotion (such as compensation for the services,

encouragement for nurses, organizational culture improvement, atmosphere change in society and organizational). The results of the study indicated that the following factors can improve motivation and job promotion in nurses; the factors include: simultaneous attention to individual growth, development and improvement of organizational atmosphere for employees and organization excellence, facilitation in continuous training, clarification of job promotion path coupled with effective laws and regulations, development of meritocracy, compensation for the services based on justice, exploration of nurses professional identity within the healthcare team and society and improved social image of nurses.

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### Conflict of interest

The authors declare that they have no competing interests.

### References

1. Rahimaghaee F, Nayeri ND, Mohammadi E. Managers' roles in the professional growth of Iranian clinical nurses. *Nurs & health sci.* 2010;12(4):470-76.
2. Sheikhi MR, Fallahi-Khosnab M, Mohammadi F, Oskouie F. Skills required for nursing career advancement: A qualitative study. *Nurs midwifery stud.* 2016; 5(2): e30777.
3. Keshvari M, Shirdel A, Taheri Mirghaedi M, Yusefi AR. Challenges in the Optimal Management of Human Resources in Hospitals: A Qualitative Study. *J Qual Res Health Sci.* 2019; 7(4): 349-60. [In Persian]
4. Adeniran RK, Bhattacharya A, Adeniran AA. Professional excellence and career advancement in nursing: A conceptual framework for clinical leadership development. *Nurs Admin.* 2012; 36(1): 41-51.

5. Hayes B, Douglas C, Bonner A. Predicting emotional exhaustion among haemodialysis nurses: a structural equation model using Kanter's structural empowerment theory. *J Adv Nurs.* 2014; 70(12): 2897-909.
6. Lou JH, Yu HY, Chen SH. Factors affecting the career development of male nurses: a structural equation model. *J Adv Nurs.* 2010;66(4):900-10.
7. Afshar M, Sadeghi-Gandomani H, Masoudi-Alavi. Exploring Barriers to Promotion of Professional Empowerment from the Perspectives of Nurses working in Surgical Ward of Kashan Shahid Beheshti hospital: A Qualitative Study. *Iran J Rehabil Res Nurs.* 2019; 5(2): 1-9. [In Persian]
8. Duffield CM, Roche MA, Homer C, Buchan J, Dimitrelis S. A comparative review of nurse turnover rates and costs across countries. *J Adv Nurs.* 2014; 70(12): 2703-12.
9. Wilkes RC, Bartley SJ. A model for career planning in healthcare: Investing in a career development program will retain workers for growth. *Online J Workforce Educ Dev.* 2007; 2(3): 3.
10. Ashkezari MJD, Aeen MN. Using competency models to improve HRM. *Ideal Type of Management.* 2012; 1(1): 59- 68.
11. Bannister C. In Remembrance: John William Ramster, 1937–2011 A personal tribute. *ICES J Marine Sci.* 2012; 69(4): 694-96.
12. Dos Enfermeiros O. Regulamento dos padrões de qualidade dos cuidados especializados em enfermagem de saúde materna, obstétrica e ginecológica. Lisboa: Ordem dos Enfermeiros. 2011.
13. Gillespie M. Using the Situated Clinical Decision-Making framework to guide analysis of nurses' clinical decision-making. *Nurse educ pract.* 2010; 10(6): 333-40.
14. Valizadeh L, Zamanzadeh V, Shohani M. Challenges of autonomy in nursing: an integrative review. *J Nurs Manag.* 2013; 2(1): 9-17. [In Persian]
15. Valizadeh S, Zamanzadeh V, Ebrahimi H, Jasemi M, Mohamadi M, Saiadi L. Assessment of nurses' perceptions of nursing power based on King Model. *J Nurs Manag.* 2013; 1(4): 28-35. [In Persian]
16. Hatam N, Heidari A, Keshtkaran V, Arjlu PH. Measurement of Career Development Dimensions



among the Staff of Shiraz University of Medical Sciences.

BIMONTHLY Health Inform Manag. 2012; 8(6): 815-23. [In Persian]

17. Van der Heijden B, Kümmerling A, Van Dam K, Van der Schoot E, Estry-Béhar M, Hasselhorn H. The impact of social support upon intention to leave among female nurses in Europe: Secondary analysis of data from the NEXT survey. *Int j nurs stud.* 2010; 47(4): 434-45.

18. Khomeiran RT, Yekta ZP, Kiger A, Ahmadi F. Professional competence: factors described by nurses as influencing their development. *Int Nurs Rev.* 2006; 53(1): 66-72.

19. Ravari A, Bazargan M, Vanaki Z, Mirzaei T. Job satisfaction among Iranian hospital-based practicing nurses: examining the influence of self-expectation, social interaction and organisational situations. *J Nurs Manag.* 2012; 20(4): 522-33.

20. Fallahi Khoshknab M. The history of nursing research and the process of capacity-building in nursing research. *Hayat.* 2013; 19(3): 1-4. [In Persian]

21. Sheikhi MR, Khoshknab MF, Mohammadi F, Oskouie F. Skills Required for Nursing Career Advancement: A Qualitative Study. *Nurs Midwifery Stud.* 2016; 5(2): e30777.

22. Sheikhi MR, Khoshknab MF, Mohammadi F, Oskouie F. Nurse Leaders' Experiences of Implementing Career Advancement Programs for Nurses in Iran. *Glob j health sci.* 2015; 7(5): 73-79.

23. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurs Educ Today.* 2004; 24(2): 105-12.

24. Colao A, Petersenn S, Newell-Price J, et al. A 12-month phase 3 study of pasireotide in Cushing's disease. *N Engl J Med.* 2012; 366(10): 914-24.

25. Fontanella BJB, Ricas J, Turato ER. Saturation Sampling In Qualitative Health Research: Theoretical Contributions. *Cad Saúde Pública.* 2008; 24(1).

26. Rybicki E, Mills E, Turner A, Simonen F. In vivo and analytical studies of forces and moments in equine long bones. *J biomech.* 1977; 10(11-12): 701-705.

27. Bessell I, Dicks B, Wysocki A, Kepner K. Understanding motivation: an effective tool for managers [dissertation ]. Florida: University of Florida. 2002:1-4.

28. Russell JE. Introduction: Technology and careers. *J Vocat Behav.* 2003; 2(63): 153-58.

29. Coutinho MT, Dam UC, Blustein DL. The psychology of working and globalisation: A new perspective for a new era. *Int J Educ Vocat Guid.* 2008; 8(1): 5-18.

30. Briscoe JP, Hall DT. The interplay of boundaryless and protean careers: Combinations and implications. *J vocat behav.* 2006; 69(1): 4-18.

31. Baker SE, Edwards R, Doidge M. How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research. National Centre for Research Methods. 2012.

32. Kong H, Cheung C, Song H. From Hotel Career Management To Employees' Career Satisfaction: The Mediating Effect Of Career Competency. *Int J Hosp Manag.* 2012; 31(1): 76-85.

33. Hough LM, Oswald FL. Personality testing and industrial-organizational psychology: Reflections, progress, and prospects. *Indus Orga Psychol.* 2008; 1(3): 272-90.

34. Bibb SC, Malebranche M, Crowell D, et al. Professional development needs of registered nurses practicing at a military community hospital. *J Contin Educ Nurs.* 2003; 34(1): 39-45.

35. Cîmpan B-I. European career development—a challenge for European human resource management. *Procedia economics and finance.* 2013; 6: 224-31.

36. Coventry TH, Maslin-Prothero SE, Smith G. Organizational impact of nurse supply and workload on nurses continuing professional development opportunities: an integrative review. *J Adv Nurs.* 2015; 71(12): 2715-27.

37. Sanjari M, Baradaran HR, Aalaa M, Mehrdad N. Barriers and facilitators of nursing research utilization in Iran: A systematic review. *Iran J Nurs Midwifery Res.* 2015; 20(5): 529-39.

38. Werner JM, DeSimone RL. Human resource development. 6<sup>th</sup> ed. Boston: Cengage Learning; 2011.

39. Nilsson J, Johansson E, Egmar A-C, et al. Development and validation of a new tool measuring nurses self-reported professional

competence—The nurse professional competence (NPC) Scale. *Nure Educ Today*. 2014; 34(4): 574-80.

40. Bell E, Campbell S, Goldberg LR. Nursing identity and patient-centredness in scholarly health services research: a computational text analysis of PubMed abstracts 1986–2013. *BMC Health Serv Res*. 2015; 15(1): 3.

41. Natan MB. Interest in nursing among academic degree holders in Israel: A cross-sectional quantitative study. *Nurs Educ Today*. 2016;38:150-3.

42. Hawkins M. Review of physician and advanced practitioner recruiting incentives [cited 2019]. Available at: URL: <http://www.merritthawkins.com/uploadedFiles/MerrittHawkings/Surveys/mha2014incensurvey.pdf>

43. Hoeve Yt, Jansen G, Roodbol P. The nursing profession: public image, self-concept and professional identity. A discussion paper. *J Adv Nurs*. 2014; 70(2): 295-309.

44. Aiken LH, Sloane DM, Bruyneel L, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *Lancet*. 2014; 383(9931): 1824-30.

45. Nurses AAoC-C. AACN standards for establishing and sustaining healthy work environments: a journey to excellence. *Am J Crit Care*. 2005; 14(3): 187-97.

46. Burney LL, Henle CA, Widener SK. A path model examining the relations among strategic performance measurement system characteristics, organizational justice, and extra-and in-role performance. *Account Organ Soc*. 2009; 34(3-4): 305-21.