Designing national nursing organization model

Manouchehr Hashemzadeh¹, Masoud Haghighi^{2*}, Seyed Amir Hosein Pishgooie³

¹PhD Candidate in Public Administration (Human Resources Management), Faculty of Educational Sciences, Management and Accounting, Roudehen Branch, Islamic Azad University, Tehran, Iran

²Assistant Professor, Department of Management and Accounting, Roudehen Branch, Islamic Azad University, Tehran, Iran; Email: MasoudHaghighi44@yandex.com

³Assistant Professor, Faculty of Nursing, Aja University of Medical Sciences, Tehran, Iran

*Corresponding author: Masoud Haghighi

Abstract

The present study aims to design a 'national nursing organization model'. It is a qualitative and exploratory research. The data consists 20 people of the academic and organizational professionals (Authorities in Ministry of health and Medical Education). The data is collected through field and library methods. In order to analyze the data, coding technique has been used. The results indicate that different personal, organizational, and educational factors involve in national nursing organization. Also, the four components; namely, management, reward system, evaluation, training and research have been introduced as some influential factors on the respective national nursing organization. Finally, the implications of the model have presented its effect on job welfare, development, nurses' behavior and job commitment. Also, Kappa coefficient equals to 0.819 which represents the validity of this model.

Keywords: nurse, national organization, job welfare, national nursing organization.

Tob Regul Sci. ™ 2022;8(2): 282-302

DOI: doi.org/10.52783/trs.v8i2.1189

Designing National Nursing Organization Model

Nurses are among the major members of the work-force in health care centers and have a significant role in caring the patients. They get an important and serious job; and must be able to offer qualitative, trustful and patient oriented health cares on pivotal moments (Landis et al., 2022). One could describe, nursing as science and art at the same time. Nurses are among the most knowledgeable groups in medical affairs; thus without considering the nurses' roles, reaching the macro goals of health system seem impossible. Nurses play a pivotal role in hospitals, clinics, and in person services and generally in health care services in Iran and worldwide. Nurses can work in different health care services such as hospitals, private doctors' offices and nurse centers. In some cases, they work in immunology and screening clinics, pathobiology laboratories, and emergency

wards; also they take part in general seminars in the field (Dehghani & Bahari, 2021). According to scientific texts, nurses can have various roles including; educational, managing, leading, caring, regulating, facilitating, supporting and consulting roles. Nurses as the largest groups of professional forces are front liners in offering health care services, and are highly interacted with the patients.

In the current world that science and knowledge develops in such a fast-paced rate; nursing, along with other medical and paramedical sciences is getting more developed and specialized in multifarious aspects. Considering the raise of society's awareness of medical cares and based on medical needs and specialized care; the presence of nurses who are professional, is highly sensed. Constant advances in health technologies has changed nursing to a complicated and challengeable profession which cannot be managed through traditional management styles. Changes in societies' health needs, along with the advances in technology, necessitate fundamental changes in the system of health care services; as such, nursing is one of the most important components of this system which should be developed accordingly. In fact, nursing is one of the significant pillars in offering health care services throughout the world. Nursing is not a mere job or profession, but a love; and what remains, if we take love away from creation. In most of the medical organizations, nursing, consists a large proportion, since it encompasses 40 to 60 percent of the whole human resources of the medical staff. Nurses when put in the organizational hierarchy in hospitals, usually are under great pressure which is imposed rather by the system or the clients; resulting in job dissatisfaction, exhaustion and stress in them (Amirkafi & Karavani, 2018).

Nowadays, economic, cultural, social, political and ecological problems have led to numerous challenges for nurses all over the world including Iran. Furthermore, as globalization process has changed the global structures, nursing systems have been under its influence as well. Globalization is a process in which, what happens in different regions and what decisions are made, can influence other societies. With regard to health and nursing, it can be said that globalization has brought about various challenges; as the outbreak of a certain disease in one part of the world, influences the whole world, thus the decisions made for health care system, esp. nursing have significant effects on the process of health globalization. The aforementioned matter, was truly felt in the universal spread of corona virus (Ruiz Estrada & Khan, 2020).

Analyzing nurses' status in health care services throughout the world indicates that nurses are the largest group of healthcare team. Observations reveal that 50 to 80 percent of healthcare services is carried out by the nurses, thus, healthcare quality, highly depends on the way nurses offer health services. Thus, in case a change be necessary in the policies and planes of healthcare systems, nurses play a pivotal role. Healthcare system consists of organizations, institutions, groups and people who are engaged in policy-making, managing human resources, financing and offering health services in public and private sectors, with the aim to keep society members healthy, and be responsible to peoples' expectation and offer financial support to help them overcome healthcare costs. Access to high quality, efficient, fair and resilient health services are among the sub-goals of healthcare system (World Health Organization, 2000). Although nurses play a significant role in

society and there is a need to care more about them, unfortunately nursing management units don't act unitedly; that is one organization is responsible for training them, but another organization is responsible to recruiting required nurses. Thus, nursing organization can act as a total legal and advisory entity, and deputy nursing of health ministry as a policy maker system; not to mention that in organization, dealing with nurses is based on the instructions of Ministry of Labor and recruiting procedures of the country. Nurses are among the influential members of medical community and without them, reaching the goals of health system seems impossible. Therefore, the mission of a united and national nursing organization is to create a common point of view regarding principles, perspectives and values of nurses community, their role, commitments and their desired qualifications in health system, together with appropriate training, researching, managing, human resources; would benefit nurses in particular and country's health system in general (Atae et al., 2014).

Different organizations do exist to be responsive toward demands and expectations of a respective society; therefore they need to be able to adapt themselves with the changes occurring within that specific society (Markopoulos et al., 2021). Organization's correct recognition of their surrounding environment's situations and fresh perspectives, could help them change their current condition to a better one (Mohamed et al., 2022). Accordingly, and with regard to medical needs of the society and the scientific move toward developing and defining new nursing roles, the nurses would be able to act in accordance with scientific, technological and innovatory developments; thus, the present research, by undertaking a study, aims to introduce a model called national nursing organization model, and in doing so, we have been tried to keep all the main principles into account. In fact, the writer intends to answer this principle question that what kind of model could be developed for national nursing organization of Iran.

Methodology

The present study is a fundamental-functional research. Regarding kind of data, it is qualitative and exploratory, and with the help of the professionals in the field, different aspects, components and indicators of national nursing organization model have been investigated. Regarding data collection, it is data based, cross sectional research. The statistical society consists of academic and organizational experts (officials in ministry of health) who at least must have gotten a PhD degree and currently have an executive and educational job in the organizational field of nursing and whom have had influence on the nursing domain in the past till present. The aforementioned group so called 'aware experts' had participated in the interview. In this research judgmental sampling has been used, in which based on saturation principle, 20 people has been considered as sample. Interviewees' demographic features are as follow (Table 1).

[Insert Table 1 near here]

In order to understand and conceptualize the mentioned model; available texts and articles regarding national nursing organization model has been analyzed through library research method

(the texts consist of books, valid scientific databases and university dissertations. Also, the tool to recognize indicators and components of the model, is interviewing. In- personal interviews 6 fundamental questions have been asked. Concerning the fact that after 20 interviews, main and secondary factors were repeated, the researcher concluded saturation; i.e., the new data was not different from the previously collected data; therefore, interviews stopped. The time allocated to the interviews was between 30 to 90 minutes. The main questions asked in the process of interviewing, are as follows in Table 2.

[Insert Table 2 near here]

To ensure the validity of the instruments and the accuracy of researcher's findings, valuable opinions of professors familiar with the field and also university experts were used. At the same time, participant's opinions were taken into account in data analysis. In order to calculate the reliability of the interview, within subject agreement method of two coders has been applied. In doing so, one of management professors who was familiar with coding system was asked to cooperate in the project as secondary coder. Together and with the help of this colleague, the researcher was able to codify three interviews according to the mentioned method. Thus, the percentage of within the subject agreement which is used as reliability index of the present research, was calculated. Therefore, reliability earned by the two coders was 77.8%.

The method of data analysis was theoretical codification (open, Axial, selective) derived from grounded theory. In doing so, reviewing of the related literature and interviewing with the experts were utilized as well.

Results

As stated above, the current research has benefited from reviewing the related literature and interviewing with experts to extract indicators and propose a model. According to Strauss and Corbin, open coding is defined as 'a part of analysis that is specifically related to naming and categorizing the phenomenon through scrutinizing the data'. In other words, in this kind of coding, the concepts derived from the interviews and documents are categorized based on their relationship with similar subjects; thus, in the first step, it is necessary to identify meaningful units. In Table 3, meaningful units of primary codes are presented. Due to the length of the processes, the steps have been summarized as follows (Table 3).

[Insert Table III near here]

Open coding

As stated above, 70 codes had been extracted through interviewing and open coding. In this step, the concepts themselves are classified according to their relations with similar subjects; this process is called classification (theming). The titles allocated to the classes, are more abstract than the concepts within that specific class. Classes are of great conceptual power, since they can keep

concepts under their influence. Generally, the selected titles are the researcher's own choices and it has been attempted that the choices have utmost relation and consistency with the data representing them. The other source for selecting the titles, was the terms which participants utilized during the research process and therefore were applicable for the researcher too. Table 4 resulted from open coding consists of two parts; as such, table of primary extracted codes from the interviewees and table of extracted classes of concepts including their secondary codes.

[Insert Table 4 near here]

Axial coding

The purpose of axial coding is to create a connection between generated categories (in the open coding process). This is usually done in accordance with the paradigm according to which the theoretician performs theorizing process conveniently. The foundation of making connections in axial coding is based on one category expansion. Main categorization (such as a central idea or event) is defined as the phenomenon and other categorizations are related to this main categorization. Casual conditions are events which create and develop a phenomenon. In this stage, researcher chooses one of the classes as the main class and considers it as the central phenomenon in the process and determines the connection of other classes with that main class. Therefore, the basis of making connection in axial coding, is expanding one of the classes. Also, in the second step, the present research has been generated according to high level documents and detailed and in-depth interviews and categorizing them, which in the end leads to 11 secondary categories and 3 main categories (Table 5).

[Insert Table 5 near here]

Selective coding

Finally, selective coding process was used. Selective coding is defined as the process of selecting the main category and systematically relating it to other categories, then verifying the validity of these relationships and in the end completing categories which need further refinement and development. Based on the open and axial coding results, selective coding is the core of theorizing process; since it systematically relates the main category to other categories and presents those relationships within the framework of one single narrative and thus, corrects categories which need further improvement and development.

Based on what mentioned above, final coding of this process is demonstrated in Table 6. In this table codes of interviews and the source of these codes, are also presented.

[Insert Table 6 near here]

Finally, based on the investigations of the present research, national nursing organizational model is proposed as follows (Figure 1).

[Insert Figure 1 near here]

In order to control the extracted concepts; researcher's opinion has been compared with that of an expert. Kappa index fluctuates between zero and one. The closer the metric to one, the more agreement is seen between raters. The value of the index was calculated using spss software and in meaningful level 0.000, 0.819 was calculated. With regard to the fact that meaningful number is less than 0.05 the assumption of independent codes are rejected.

[Insert Table 7 near here]

Results and Discussions

As demonstrated above, this research focused on designing a 'national nursing organization model'. The model was presented based on reviewing related literature, interviewing with experts and theoretical coding. National nursing organization is an organization with a nationwide target and aims to provide services in three different aspects of prevention, treatment and rehabilitation for the whole society. In this model nurses' needs and duties are specifically considered and as such would be a fundamental change in all the aspects of nursing in the country. The results demonstrated that national nursing organization consists of personal, organizational and educational factors. In this regard, Bekr et al. (2020) declared that national nursing organization must view nurses' skill indicators as a personal factor. Also as stated by Shafe'I et al. (2020) in their research, psychological factors and nurses' individual differences must also be taken into account. In the present research, considering nurses' needs, motivation and also self- efficacy factors were considered as personal factors in the process of interviewing. In the section of organizational factors, Yazdani et al. (2021) had focused on flexible structure. Also, Sullivan et al. (2021) emphasized professional training of nurses. Furthermore, Ghanem (2021) emphasized that decreased concentration in decision making is an organizational factor. But, the interviews got during the present research, demonstrated that in expert's opinions, flexibility in accepting change, considering current infrastructure, the degree of formality in nursing organization and legality in the structure of national nursing organization are the main organizational factors in the model. Other than personal and organizational factors, educational and researching factors were also emphasized by experts and as stated by them, determining educational needs, determining research needs, assessing educational facilities, considering educational structure and congruity of education type with its application in nursing must be considered in the national nursing organization.

Also four components of management, reward system, evaluation, and researching are considered as influencing factors on national nursing organization. According to the experts taken part in this research, national nursing organization must support nursing evaluation system, allocate enough budget for improving national nursing organization, help to decrease nursing tensions and cancel the burdensome laws of nursing organization; and these factors must be included in the management schedules of national nursing organization. Also, regarding rewards, they emphasized flexibility in offering rewards, improving the level of facilities based on performance and variations

in offering rewards. Training, researching and assessment were aspects which the experts taken part in the present research also emphasized on; but those factors weren't considered as influencing factors in other research. Finally, the implications of the model include job welfare, development, nursing behavior and job commitment. Other research regarding development, emphasized on nurses' personal development, nurses' organizational development and nurses' professional development; but, nurses' social development, nurses' self- management development, nurses' educational and research development were among the factors emphasized in the present research. Also with regard to nursing behavior, experts in the present research focused on professional ethics, reverencing self- sacrifice among nurses, providing compassionate care, respecting patients and respecting nurses' society. Job welfare and job commitment were factors which other research were not spoken of.

The final result of this research shows that the majority of research done in this field didn't emphasize on educating and researching factors whereas, the experts in the present research introduced these two as significant factors in national nursing organization.

REFERENCES

- 1. Amir-Kafi, M., & Karvani, A. 2018. Effects of organizational justice and organizational identity on organizational commitment. *Iran's Social Issues*, 9(1): 22-51.
- 2. Bakr, M., Zarei, M., & Babashahi, B. 2020. Designing an empowerment model of nursing managers at training and treatment hospitals of Tehran University. *Nursing Management*, 9(4): 96-111.
- 3. Barasteh, S., Rassouli, M., Karimirad, M. R., & Ebadi, A. 2021. Future Challenges of Nursing in Health System of Iran. *Frontiers in Public Health*, 9.
- 4. Dehghani, F., & Bahari, Z. 2021. Mediating role of cognitive flexibility in the relationship between occupational stress and the psychological well-being of nurses. *Journal of Iran's Nursing*, 34(133): 52-70.
- 5. Ghanem, R. 2021. Total Quality Management and Innovation in Nursing Service Organizations. *EC Nursing and Healthcare*, 3.
- 6. Harper, M. G., Ulrich, B., Whiteside, D., Warren, J. I., & MacDonald, R. 2021. Preceptor Practice: Initial Results of a National Association for Nursing Professional Development Study. *Journal for Nurses in Professional Development*, 37(3):154-162.
- 7. Landis, T., Godfrey, N., Barbosa-Leiker, C., Clark, C., Brewington, J. G., Joseph, M. L., & Weybrew, K. A. 2022. National Study of Nursing Faculty and Administrators' Perceptions of Professional Identity in Nursing. *Nurse Educator*, 47(1): 13-18.
- 8. Lu, W., Jiang, W., Zhang, N., & Xue, F. 2022. Design of Intelligent Nursing Decision Support System Based on Multiattribute Decision Model. *Journal of Healthcare Engineering*, 2022.

- 9. Markopoulos, E., Robl, P., & Gann, E. L. 2021. Managing Interdisciplinary Human Intellectual Capital for Project and Organizational Development. *In International Conference on Applied Human Factors and Ergonomics*: 394-402. Springer, Cham.
- 10. Mohamed, N. A., Ahmed, H. M., & Abdellh, S. M. 2022. Effect of Quality Orientation Educational Program on Nursing Staff loyalty. *Assiut Scientific Nursing Journal*, 10(28): 10-20.
- 11. Mosaddghzdeh, M., & Afshari, M. 2016. Effects of quality management on occupational satisfaction of employees at the surgery ward of Valiasr Hospital. *Quarterly of Health*, 2(2): 147-158.
- 12. Nikbakht, A. R., & Rezapour, R. 2016. Designing an applied model of professional excellence in nurses. *Quarterly of Strategy*, 24(77): 295-305.
- 13. Rezapour-Nasrabad, R. 2014. Designing an applied model of professional excellence of nurses; qualitative study using Grounded Theory. In *Tenth International Conference on Strategic Management*, Tehran.
- 14. Ruiz Estrada, M. A., & Khan, A. 2020. Globalization and pandemics: the case of COVID-19. Available at SSRN 3560681.
- 15. Sayyari-Fard, A., Abol-Hasani, F., Ghadirian, L., Nazari, M., Rajabi, F., Haghjou, L., & Mounesan, L. 2016. Effective Reward System on Hospital Staff Performance: Challenges and Solutions (A Qualitative Study in Hospitals Affilliated to Tehran Universitu of Medical Sciences). *Journal of Hospital*, 5(4): 9-19.
- 16. Shafei, B.; Sameri, M., & Keihan, J. 2020. Designing a model of nurse empowerment using individual and managerial factors mediated with the role of individual performance. *Journal of Nursing and Midwifery*, 18(4): 341-360.
- 17. Sullivan, C.E., Segovia Weber, L., Viveros Lamas, P., Metzger, M. L., Rodriguez-Galindo, C., & Day, S. W. 2021. A sustainable model for pediatric oncology nursing education and capacity building in Latin American hospitals: Evolution and impact of a nurse educator network. *Pediatric Blood & Cancer*, e29095.
- 18. Yazdani, Sh., Sadegh Zarei, R., & Hosseini Izdeh, M. 2021. Explaining indicators of academic competitive advantages at universities of medical sciences: a qualitative content analysis. *Research in Medical Science Education*, 13(3): 55-61.

Table 1

Demographic statistics of interviewees

	Abundanc	Variable	Class	Abundanc	Variable	Class	Abundanc
Class	е		Class	e			e
Directors ministry health	in of 7	Level of educatio		20	Age	40 to 45	8
	8	n				46 to 50	6

University							Ozran 50	
faculty memb	ers						Over 50	6
Managers	in			femal e	5	work	10 to 15	6
nursing organization		5	Gender	Man	15	experien ce	16 to 20	7
Organization				iviali	1)		Over 20	7

Table 2

The questions asked in interviews

Row	Questions
1	In your opinion, what are the constituent factors of national nursing organization?
2	In your opinion, what are the influencing factors on national nursing organization?
3	In your opinion, what are the impressionable factors from national nursing organization?
4	In your opinion, what are the implementation platforms of national nursing organization?
5	In your opinion, what are the implementation mechanisms of national nursing organization model?
6	In your opinion, what are the obstacles to the implementation of national nursing organization model?

Table 3
Primary meaningful units

References	Interviewee's code
Bekr et al. (2020)	I10, I6, I5, I1, I7
Shafe'I et al. (2020)	I13, I14, I15
Shafe'I et al. (2020)	I12, I5, I14, I2, I11
Interview	I3, I4, I11, I5
Interview	I12, I8, I3
Interview	12, 16, 110, 114
Yazdani et al. (2021)	I11, I9, I10, I14, I5
Sullivan et al. (2021)	I6, I1, I13
Ghanem(2021)	I8, I3, I15, I12, I2
Ghanem (2021) and Bekr et al.	I5, I11, I4, I13
(2020)	
	Bekr et al. (2020) Shafe'I et al. (2020) Shafe'I et al. (2020) Interview Interview Interview Yazdani et al. (2021) Sullivan et al. (2021) Ghanem(2021) Ghanem (2021) and Bekr et al.

Flexibility in accepting change	Interview	I1, I2, I11, I7, I15
Considering current infrastructure	Interview	I8, I7, I11, I18
The degree of formality in nursing	Interview	17, 13, 19, 112, 117
organization Legality in the structure of national nursing organization	Interview	I1, I9, I13
Determining educational needs	Interview	I6, I7, I5, I7
Determining research needs	Interview	I10, I3, I18, I2
Using efficient educational content	Interview	I7, I5, I1, I7
Evaluating educational facilities	Interview	I11, I8, I4, I9
Considering educational structure	Interview	I4, I2, I6
Congruity of education type and its application in nursing	Interview	I4, I2, I8, I15, I9
Management support and supervision	Barasteh et al. (2021)	I8, I2, I19, I1
Considering nurses' satisfaction	Mosaddeghzadeh and Afshari (2016)	I11, I1, I15, I8, I6
Considering quality in administrative system	Ghanem (2021) Mosaddeghzadeh and Afshari (2016)	16, 19, 13, 15
Supporting evaluation of nursing organization	Interview	I2, I1, I10, I7
Allocating sufficient budget to improve national nursing organization	Interview	I10, I6, I5, I1, I7
Helping to reduce tensions in nursing	Interview	I13, I14, I15
Cancelling the burdensome rules of nursing system	Interview	I12, I5, I14, I2, I11
Reward based on performance	Sullivan et al. (2021)	I3, I4, I11, I5
Granting necessary facilities	Sayyari fard et al. (2016)	I6, I8, I10, I17, I4
Policy making and legislation	Barasteh et al. (2021) Sayyari Fard et al. (2016)	I10, I8, I1, I3, I4

Flexibility in rewards	Interview	I3, I1, I5, I14, I16
Improving the levels of facilities based on performance	Interview	I2, I6, I10, I14
Variations in rewards	Interview	I7, I8, I10, I11, I4
Performance oriented evaluation	Interview	110, 18, 11, 13, 14
Improving the level of self-evaluation in nurses	Interview	15, 11, 112, 114, 116
Proper training of evaluation of others in nursing society	Interview	I12, I6, I10, I14
Informal evaluation of nurses	Interview	I6, I8, I10, I17, I4
Monitoring patient's satisfaction	Interview	113, 19, 15, 14, 112
Monitoring nurses satisfaction level and delivering practical report	Interview	15, 18, 17, 16, 14
Providing necessary training in respect of functions of nursing	Interview	15, 111, 14, 113
providing necessary information in nursing curriculum	Interview	I1, I2, I11, I7, I15
Inclusion of necessary contents in the curriculum of nursing education	Interview	I8, I7, I11, I18
Research as an obligation among nurses	Interview	15, 18, 17, 16, 14
Benefiting professional professors in nursing education	Interview	15, 18, 17, 16, 14
Nurses' personal development	Harper et al. (2021)	17, 13, 19, 112, 117
Nurses' organizational development	Mohammed et al. (2022)	I1, I9, I13
Nurses' professional development	Harper et al. (2021)	I3, I7, I19
Nurses' social development	Interview	I11, I3, I14, I12, I9
Nurses' self-management development	Interview	I10, I1, I12, I14

Nurses' educational development	Interview	16, 17, 15, 17
Nurses' research development	Interview	I10, I3, I18, I2
Desirable performance	Lu et al. (2022) Nikbakht and Rezapour (2016)	I7, I5, I1, I7
Professional voluntarily acts	Rezapour (2014) Nikbakht and Rezapour (2016)	I4, I2, I8, I15, I9
Professional ethics	Interview	I8, I2, I19, I1
Reverencing self-sacrifice among nurses	Interview	I11, I1, I15, I8, I6
being companionate to patients	Interview	16, 19, 13, 15
Respecting patients	Interview	I2, I1, I10, I7
Respecting nursing society	Interview	14, 12, 18, 115, 19
Occupational success	interview	I8, I2, I19, I1
Be energetic while doing the job	interview	I11, I3, I14, I12, I9
Passion for the job	interview	I8, I7, I11, I18
Occupational self-efficacy	interview	17, 13, 19, 112, 117
Talent discovery	interview	I1, I9, I13
Professional cares	interview	16, 17, 15, 17
Boosting responsibility in nurses	interview	I10, I3, I18, I2
Desirable responding	interview	I7, I5, I1, I7
Job satisfaction	interview	I4, I2, I8, I15, I9
Professional affiliation	interview	I8, I2, I19, I1
Organizational affiliation	interview	I11, I1, I15, I8, I6
Being committed to the job values	interview	16, 19, 13, 15

Table 4

Open coding

Classes	Secondary codes of Basic units
	Considering skill indicators in nurses
	Considering psychological factors
Personal factors	Considering personal factors
	Considering nurses' needs
	Considering nurses' motivation
	Considering self-efficacy factors among nurses
	Flexible structure
	Considering professional training of nurses
	Decreased concentration in decision making
0 1	Desired management and leadership
Organizational	Flexibility levels in accepting changes
factors	Considering current infrastructure
	The degree of formality in nursing organization
	Observing laws in national nursing organization structure
	Determining educational needs
	Determining research needs
Educational	Utilizing efficient educational contents
factors	Evaluation of educational facilities
	Considering educational structure
	Consistency of education and its application in nursing job
	Management and supervision support
	Considering nurses' satisfaction
	Considering quality in administrative system
management	Supporting the evaluation of nursing system
	Allocating sufficient budget to improve national nursing organization
	Helping to reduce tensions in nursing
	Cancelling the burdensome rules of nursing system
	Reward based on performance
	Granting necessary facilities
Reward system	Policy making and legislation
	Flexibility in rewards
	Improving the levels of facilities based on performance
	Variations in rewards
	Performance oriented evaluation
	Improving the level of self-evaluation in nurses

evaluation	Proper training of evaluation of others in nursing society			
	Informal evaluation of nurses.			
	Monitoring patient's satisfaction			
	Monitoring nurses satisfaction level and delivering practical report			
	Providing necessary training in respect of functions of nursing			
	providing necessary information in nursing curriculum			
Teaching and	Inclusion of necessary contents in the curriculum of nursing education			
researching	Research as an obligation among nurses			
	Benefiting professional professors in nursing education			
	Nurses' personal development			
	Nurses' organizational development			
	Nurses' professional development			
development	Nurses' social development			
	Nurses' self-management development			
	nurses' educational development			
	Nurses' research development			
	Desirable performance			
	Professional voluntarily acts			
	Professional ethics			
Nursing behavior	Reverencing self-sacrifice among nurses			
	being companionate to patients			
	Respecting patients			
	Respecting nursing society			
	Occupational success			
	Be energetic while doing the job			
	Passion for the job			
Occupational	Occupational self-efficacy			
welfare	Talent discovery			
	Professional cares			
	Boosting responsibility in nurses			
	Desirable responding			
	Job satisfaction			
Job commitment	Professional affiliation			
	Organizational affiliation			

Table 5

Axial coding

Main classes	Sub- classes	Secondary codes
Constituent factors	Personal factors	Considering skill indicators in nurses
		Considering psychological factors
		Considering individual differences
		Considering nurses' needs
		Considering nurses' motivations
		Considering self-efficacy factors in nurses
	Organizational	Flexible structure
	factors	Considering nurses' professional training
		Decreased concentration in decision making
		Desired management and leadership
		The degree of flexibility in accepting changes
		Considering current infrastructure
		The degree of formality in nursing organization
		The level of observing law in national nursing
		organization
	Educational	Determining educational needs
	factors	Determining research needs
		Utilizing efficient educational contents
		Evaluating educational facilities
		Considering educational structure
		Appropriateness of education type and its application
		in nurses' job
Influencing factors	management	Management support and supervision
		Considering nurses' satisfaction
		Considering quality in administrative system
		Providing support for evaluation of nursing
		organization
		Allocating enough budget to improve nursing system
		Help to decrease nurses' tensions
		Cancelling the burdensome rules of nursing
		organization
	Reward system	Reward based on performance
		Granting necessary facilities
		Policy-making and law-making
		Flexibility in providing rewards

		Improving performance based facilities
		Variation in providing rewards
	evaluation	Action oriented evaluation
		Improving the level of self-evaluation among the nurses
		Proper training to evaluate others in nursing
		organization
		Informal evaluation of nurses
		Monitor patients' satisfaction
		Monitor nurses' satisfaction and providing practical
		reports
	Educating and	Providing necessary training in nursing
	researching	providing necessary information in nursing curriculum
		Inclusion of necessary contents in the curriculum of
		nursing education
		Research as an obligation among nurses
		Benefiting professional professors in nursing education
Consequences	development	Nurses' personal development
		Nurses' organizational development
		Nurses' professional development
		Nurses' social development
		Nurses' self-management development
		nurses' educational development
		Nurses' research development
		Desirable performance
		Professional voluntarily acts
		Professional ethics
	Nursing Behavior	Reverencing self-sacrifice among nurses
		Being compassionate to patients
	Deliavioi	Respecting patients
		Respecting nursing society
	Educational	Gob success
	welfare	Be energetic while doing the job
		Passion for the job
		Occupational self-efficacy
		Talent discovery
		Professional care
	Job	Boosting nurses
	commitment	Desirable responding
		Job satisfaction

Professional affiliation
Organizational affiliation
Commitment to the job values

Table 6

Selective coding

Main classes	Sub -classes	Secondary codes	References	Interviewee's code
Constituent factors	Personal factor	Considering skill indicators in nurses	Bekr et al. (2020)	I10, I6, I5, I1, I7
		Considering psychological factors	Shafe'I et al. (2020)	I13, I14, I15
		Considering individual differences	Shafe'I et al. (2020)	I12, I5, I14, I2, I11
	Considering nurses' needs	Interview	I3, I4, I11, I5	
	Considering nurses' motivation	Interview	I12, I8, I3	
		Considering self-efficacy factors in nurses	Interview	I2, I6, I10, I14
	Organizational	Flexible pattern	Yazdani et al. (2021)	I11, I9, I10, I14, I5
	factors	Considering nurses' professional training	Sullivan et al. (2021)	I6, I1, I13
		Decreased concentration in decision making	Ghanem (2021)	I8, I3, I15, I12, I2
		Desired management and leadership	Ghanem (2021) Bekr et al. (2020)	I5, I11, I4, I13
		The degree of flexibility in accepting changes	Interview	I1, I2, I11, I7, I15
		Considering current infrastructure	Interview	I8, I7, I11, I18

		The degree of formality in nursing organization	Interview	I7, I3, I9, I12, I17
		Observation of law in the structure of national nursing organization	Interview	I1, I9, I13
	Educational factors	Determining educational needs	interview	I6, I7, I5, I7
		Determining research needs	interview	I10, I3, I18, I2
		Using efficient educational content	interview	I7, I5, I1, I7
		Assessing educational facilities	interview	I11, I8, I4, I9
		Considering educational structure	interview	I4, I2, I6
		Congruity of education type and its application in nursing	interview	I4, I2, I8, I15, I9
Influencing factor	management	Management support and supervision	Barasteh et al (2021)	I8, I2, I19, I1
		Considering nurses' satisfaction	Mosaddeghzadeh and Afshari (2016)	I11, I1, I15, I8, I6
		Considering quality in administrative system	Ghanem (2021) Mosaddeghzadeh and Afshari (2016)	I6, I9, I3, I5
		Support for evaluation of nursing organization	interview	I2, I1, I10, I7
		Allocating enough budget to improve national nursing organization	interview	110, 16, 15, 11, 17
		Help to reduce nursing tensions	interview	I13, I14, I15
		Cancelling the burdensome laws in nursing system	interview	I12, I5, I14, I2, I11

Reward system	Rewards based on performance	Sullivan et al. (2021)	I3, I4, I11, I5
	Granting necessary facilities	Sayyari Fard et al. (2016)	I6, I8, I10, I17, I4
	Policy and law making	Barasteh et al. (2021) Sayyari Fard et al. (2016)	I10, I8, I1, I3, I4
	Flexibility in providing rewards	interview	I3, I1, I5, I14, I16
	Improving levels of facilities based on performance	interview	I2, I6, I10, I14
	Variations in rewards	interview	I7, I8, I10, I11, I4
Evaluation	Action oriented evaluation	interview	I10, I8, I1, I3, I4
	Improving self-assessment among nurses	interview	15, 11, 112, 114, 116
	Correct training to evaluate one another in nursing system	interview	I12, I6, I10, I14
	Informal evaluation of nurses	interview	I6, I8, I10, I17, I4
	Monitoring patients' satisfaction	interview	I13, I9, I5, I4, I12
	Monitoring nurses' satisfaction and providing practical reports	interview	15, 18, 17, 16, 14
Educating and Researching	Providing necessary training regarding	interview	15, 111, 14, 113
	Providing necessary information in nursing curriculum	interview	I1, I2, I11, I7, I15
		interview	I8, I7, I11, I18

		Research as an obligation in nursing	interview	I5, I8, I7, I6, I4
		Benefiting experts in teaching nursing	interview	15, 18, 17, 16, 14
Consequences	Development	Nurses' personal development	Harper et al. (2021)	I7, I3, I9, I12, I17
		Nurses' organizational development	Mohammed et al. (2022)	I1, I9, I13
		Nurses' professional development	Harper et al. (2021)	I3, I7, I19
		Nurses' social development	interview	I11, I3, I14, I12, I9
		Developing self-management in nurses	interview	I10, I1, I12, I14
		Nurses' educational development	interview	I6, I7, I5, I7
		Nurses' research development	interview	110, 13, 118, 12
	Nursing behavior	Desirable performance	Loo et al. (2022) Nikbakht and Rezapour (2016)	I7, I5, I1, I7
		Professional voluntarily acts	Rezapour (2014) Nikbakht and Rezapour (2016)	I4, I2, I8, I15, I9
		Professional ethics	interview	18, 12, 119, 11
		Reverencing self-sacrifice among nurses	interview	I11, I1, I15, I8, I6
		Be compassionate toward patients	interview	16, 19, 13, 15
		Respecting patients	interview	I2, I1, I10, I7
		Respecting nursing society	interview	14, 12, 18, 115, 19
	Occupational	Occupational success	interview	18, 12, 119, 11
	welfare	Being energetic in doing the job	interview	I11, I3, I14, I12, I9
		Having passion for the job	interview	I8, I7, I11, I18
		Occupational self-efficacy	interview	I7, I3, I9, I12, I17
		Talent discovery	interview	I1, I9, I13

	Professional cares	interview	I6, I7, I5, I7
Occupational commitment	Improving nurses' responsibilities	interview	I10, I3, I18, I2
	Desirable responding	interview	I7, I5, I1, I7
	Job satisfaction	interview	14, 12, 18, 115, 19
	Professional affiliation	interview	18, 12, 119, 11
	Organizational affiliation	interview	I11, I1, I15, I8, I6
	Adherence to job values	interview	16, 19, 13, 15

Table 7

Amount of agreed values

	value	Meaningful number
Agreed Kappa	0.819	0.000

Figure 1

The conceptual model of the research

