# Future Challenges of Nursing in Health System of Iran

**Salman Barasteh**

  Health Management Research Center, Nursing Faculty of Baqiyatallah University of Medical Sciences, Tehran, Iran.

**Maryam rassouli**

  Cancer Research Center, Shahid BeheshtiUniversity of Medical Sciences, Tehran, Iran.

**Mohammad Reza Karimirad**

  School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran

**Abbas Ebadi**  ( ✉ ebadi1347@yahoo.com )

  Behavioral Sciences Research Center, Nursing Faculty of Baqiyatallah University of Medical Sciences, Tehran, Iran.

---

**Research Article**

---

# Abstract

**Background:** Nursing development is considered as one of the most important ways to achieve the universal health coverage and sustainable develop goals in different countries. Nursing in Iran has the potential to provide services at all levels of universal health coverage. Therefore, planning for nursing in Iran needs to recognize the future challenges. This study aims to explore the future challenges of nursing in the health system of Iran from the view of experts

**Methods:** In this qualitative study, 11 semi-structured interviews were conducted with nursing experts by purposive sampling in 2017-2018. Interviews were recorded and transcribed and framework analysis method were used to analysis the data.

**Results:** The results showed that a favorable future requires planning in three areas of nursing governance challenges, including centralized nursing stewardship, policy-making and legislation, monitoring and evaluation, and cooperation and communication with other institutions, inadequacy of professional development with social demands, including community-based nursing, nursing upgrades with disease patterns, expanding home care, expanding care centers, and use of technology, the challenge of human resource management, including nursing education tailored to the needs of the community, empowering nursing managers, recruiting and retaining nurses, and specialized nursing.

**Conclusions:** A favorable future requires establishing a coherent nursing government, professional developing of nursing based on social demands, and enhancing human resources in line with the emerging needs of the future.

# Introduction

The global nursing workforce includes 27.9 million people, of which 19.3 million are professional nurses. These data show that 59% of health professionals in the world are nurses (WHO, 2020). The development of nursing to achieve the goal of universal health coverage (UHC), i.e. "ensuring the effective access of all people to health services"(Dye, Reeder, &Terry, 2013), requires careful planning for training and supply of the nursing workforce (WHO, 2016a). Moreover, nursing development directly affects social development health (SDH) components (Upvall & Luzincourt, 2019). Attention to nursing development is of particular importance at the international level so that the World Health Organization has named 2020 as the Year of Nursing and Midwifery on the occasion of the 200th birthday of Florence Nightingale (Hewison, 2020). In this year, the world faced a corona pandemic. Nurses, provide health services at the forefront of health care professionals as the largest group of service providers (Shu-Ching, Yeur-Hur, & Shiow-Luan, 2020).

By 2050, the health systems in all the countries of the world will face serious challenges, including the annual deaths of 38 million people with contagious diseases, the spread of emerging diseases, and a 22% increase in the population over the age of 60, and providing nursing services in response to these challenges plays a key role. Nurses, as members and coordinators of inter-professional teams, provide people-centered services, services to the elderly, reduction of infant, mother, and child mortality, as well as

emergency services to palliative care. Nurses are also key actors in crises and subsequent planning, management, and basic services (WHO, 2016a).

Health system of Iran also faces major challenges, including the tsunami of the elderly population, increasing the burden of NCDs, lifestyle changes, as well as increasing health costs, maintaining the quality of care, the pattern of hospital beds, the place of death, and the dignity of patients(Cheraghi, Ghiyasvandian, Aarabi, 2015). In response to the mentioned challenges, the Ministry of Health also began to develop the quantity and quality of nursing services in 2013 with the creation of the Deputy Minister of Nursing. The most important policies of the Deputy Minister of Nursing included the establishment and development of counseling centers, the provision of home nursing services, the development of regulations for long-term care centers and hospices, the establishment of a structure for patient and family health education, and explore the role of nurses in universal health coverage and community-based nursing (Deputy of nursing, 2019). In this regard, Iran's parliament in the Sixth Development Plan forces the Ministry of Health to implement a "comprehensive and public health services system" with priority on health and prevention over treatment based on primary health care with a focus on the referral system, and the Family physician Program by general practitioners and family physician and nurses to provide nursing care in the community level and at home (Islamic Consultative Assembly, 2016).

Progress has been made in Iranian nursing over the past four decades so that about 230000 nurses are working in the public and private sector, and the ratio of nurses to beds is estimated to be 0.8(Cheraghi, Ghiyasvandian, Aarabi, 2015). The system of higher education and the nursing profession has also evolved from a hospital-based program to a university-supervised system. In a way, the academic nursing education is offered in three general categories of bachelor, master's, and doctoral. Clinical nursing is also presented in four general categories, including managerial, general, specialized, and primary (Mirzabeigi & Salarianzadeh, 2017). Macro policies for nursing in Iran are also made by the Deputy of Nursing, Nursing Board, Nursing Organization, and Scientific Associations (Esmaeili, Dehghan-Nayeri, Negarandeh, 2013). Despite the progress made, nursing in Iran faces challenges in providing manpower, job satisfaction, social status, theory-practice gap, improving nursing education curricula, and weakness in creating community-based nursing(Farsi, Dehghan-nayeri, Negarandeh, & Broomand, 2010).

Despite the mentioned progress and challenges, it seems that the future of Iranian nursing is a controversial issue, which will face many uncertainties. Some international nursing leaders have recognized the need to develop a forward-looking approach. Olsen and McFarlin suggest that each country should have a foresight committee consisting of nursing leaders to improve the nursing situation (Olsen & McFarlin, 1998). Nursing futurists also suggest that nursing leaders should formulate future strategies, considering the effect of global change on nursing (Freed & McLaughlin, 2011). It is important to consider the wide range of factors and uncertainty that affect the future of nursing and develop strategies to deal with them using the views of experts. Therefore, the present study aims to explore the views of nursing experts regarding the future challenges of nursing in the health system of Iran.

# Methods

## Design/Participant

In this qualitative study, 11 nursing policymakers and decision-makers were selected through purposive sampling with semi-structured interviews. The participants were selected from five main nursing institutions, including the Deputy of Nursing, the Nursing Board, the Nursing Organization, scientific associations, and nursing schools. The inclusion criteria of participants were having experience in policymaking and decision-making in nursing and satisfaction participating in the study process. The participants were selected from different organizational levels, including operational level (micro), middle level (meso), and top-level managers (macro). The interview was conducted after obtaining the informed consent.

## Data collection

The data were collected through semi-structured interviews with individuals in 2018 by the first author. The average interview time was 22 to 63 minutes. The interview process was based on four stages(Polit & Beck, 2004): (1) Orientation phase; in this phase, the researcher introduced himself, the research title, general and detailed objectives, possible interview time, and the recording permission were taken from the participant, as well as the permission to return to the participant; (2) Main question phase; in this phase, the main research question (How do you see the future challenges of nursing in the health system of Iran?) was asked from the participant; (3) Probing phase; in this phase, the next questions that arose based on the experiences of participations were asked according to the experiences of the participant. The examples of these questions are, how do you see the future status of nursing in Iran, for example, how do you see the challenges facing nursing? (4) Terminal question stage; in this stage, the participant was told that the researcher's questions and topics are over, if you have any other points or questions, please state them. Interviews ended after data saturation. After sampling, two more interviews were conducted and it was ensured that no other findings were added during the content analysis process.

## Data analysis

The interviews were transcribed and reviewed several times to gain an understanding of the entire interview immediately after each interview. Transcribed interviews were analyzed based on conventional content analysis by using framework analysis method. Five steps of framework analysis include (1) familiarization with the interview: immersion in the data and listening and reading the interviews several times, (2) developing a working analytical: preparing a thematic framework of key topics, (3) data indexing: structuring, (4) Charting: Draw a diagram for each topic and transfer data to it, (5) Interpreting the Data: explain the relationship between codes, subcategories, and categories (Ritchie & Spencer, 2002). The extracted codes were classified during the reduction and condensation process using MAXQDATA 10 software.

## Rigor and Trustworthiness

For Trustworthy, credibility was first determined through long-term engagement with participants, continuous data comparison, member check, and peer check. Bracketing was performed for conformability. The direction of dependability was indicated through audits by 3 other researchers of the research team. Finally, a rich analytical description of the context, methodology, and constraints, as well as maximum variation sampling were presented for transferability.

# Results

Table 1 shows the demographic information of the participants. The coding process is a continuous comparative analysis after removing duplicate codes and merging similar codes in 3 categories of "nursing governance challenge", "inadequacy of professional development with social demands", and "human resource management challenge", and 13 subcategories (Table 2).

Table 1
Demographic information of participants

| Participant NO | Age (year) | sex | Experience (years) | Department |
|---|---|---|---|---|
| P1 | 46 | female | 20 | Deputy of nursing / Board of Nursing |
| P2 | 48 | male | 22 | School of nursing/ Board of Nursing |
| P3 | 59 | male | 33 | Council of nursing |
| P4 | 45 | male | 12 | Deputy of nursing |
| P5 | 60 | female | 35 | Scientific Nursing Association/ Deputy of nursing |
| P6 | 35 | female | 8 | School of nursing |
| P7 | 42 | male | 17 | Council of nursing |
| P8 | 53 | male | 24 | School of nursing |
| P9 | 59 | male | 32 | Council of nursing |
| P10 | 37 | female | 7 | Council of nursing |
| P11 | 44 | female | 14 | School of nursing/ Scientific Nursing Association |

Table 2
Categories and subcategories

| Categories | Subcategories |
|---|---|
| The Nursing Governance Challenge | Centralized nursing stewardship |
| | Policy making and legislation |
| | Monitoring and evaluation |
| | Cooperation and communication with other institutions |
| inadequacy of professional development with social demands | Community- based nursing |
| | nursing upgrades with disease patterns |
| | expanding home care |
| | expanding care centers |
| | use of technology |
| human resource management challenge | nursing education tailored to the needs of the community |
| | empowering nursing managers |
| | recruiting and retaining nurses |
| | specialized nursing |

# Category 1: The Nursing Governance Challenge

Nursing governance is a range of actions of management organizations to implement macro nursing policies to achieve healthcare goals. Nursing governance includes four subcategories of centralized nursing stewardship, policy-making and legislation, monitoring and evaluation, and collaboration and communication with other institutions of the health system.

The first subcategory was the centralized nursing stewardship. Participants saw stewardship as the foundation of a cohesive system in any profession. *"... The Deputy of Nursing is an opportunity to make macro-policies for other nursing institutions; ... it should be able to guide macro-nursing policies in the country as a supporting authority". (*P2)

The next subcategory was policy and legislation. The existence of coherent policies and supporting laws, as well as participation in health system policies, will be an important factor in expanding services in the country's health system. *"... We do not have supporting laws in nursing. A law on tariffs for nursing services was passed in 2007, which has not been implemented after 11 years. The Sixth Development Plan also emphasizes the role of nurses...".* (P11)

The third subcategory was monitoring and evaluation. The proper monitoring and evaluation of staff, processes, and services will play an effective role in promoting nursing services. *"… All governance structures should have strong oversight of their subdivisions, but oversight in nursing is more difficult. You see, we do not have a specific area in nursing. Clinic and hospital have different characteristics compared to education and research… ".* (P3)

Finally, the fourth subcategory was cooperation and communication with other institutions of the health system, which requires extensive cooperation of government institutions with other components of the health system such as the Welfare Organization, municipalities, radio, and television based on the experiences of nursing participants. *"… In nursing, we have an effective relationship with our members (various nursing institutions) and with the entire health system. Our discourse is a broad discourse …".* (P4)

## Category 2: inadequacy of professional development with social demands

Providing health services upon the demands of society is one of the main goals of the health system of Iran. The legislative and executive institutions of the country are trying to provide the desired services to the people in the preferred place of care. This category included four subcategories of community-based nursing, nursing upgrades with disease patterns, expanding home care, and expanding care centers.

The first subcategory is community-based nursing. The participants considered models (people-centered care), integration of nursing services in primary health care and universal health coverage, and expansion of self-care. *"… Nursing development at the community level is a job that we do ourselves. It means that we can achieve one of our wishes, which is nursing at the community level, with the programs that the Deputy of Nursing is doing …".* (P4)

The second subcategory is nursing upgrades with disease patterns. In the future, health system of Iran will face a tsunami of aging and the burden of chronic diseases. Therefore, it is necessary to reform education, services, and macro policies in this area according to the needs of society. *"… In nursing we should use indigenous models in the form of micro, middle, moderate and macro in line with the emerging needs of society. We should have a model for all family members. We should have models for communities, schools, municipalities, etc.… ".* (P2)

Another subcategory was the extension of home care. The custodian of home care in the Iranian health system is the Deputy Minister of Nursing. *"… I think that Home Care is being developed. The attraction is also happening for nursing. It means they are making money. It means economy and power … This is a strength that needs to be strengthened.".*(P7)

The next subcategory was the expansion of care centers. The expansion of care centers such as long term care facilities (LTCFs) and Nursing Homes, nursing clinics, and hospices is one of the undeniable

necessities of the health system. *"... The fact is that we do not have enough care centers at the community level; now people go to the hospital emergency for anything ....".* (P1)

The last subcategory was the use of technology. Electronic nursing services and the use of communication technologies, such as health information technology, telehealth, and mobile health play an important role in the development of nursing services in the direction of health justice. *"... We need to use communication technologies such as telemedicine and telehealth to expand our services to the community".* (P1)

## Category 3: human resource management challenge

This Category had four subcategories, including nursing education tailored to the needs of the community, empowering nursing managers, recruiting and retaining nurses, and specialized nursing.

It is necessary to modify curricula and education based on demographic, epidemiological changes, and the spread of mental illness to educate nursing according to the needs of society. *"Our theoretical knowledge has become very obese, and this obesity causes a heart attack because it cannot move at all ... We did not respond to emerging needs such as social problems, aging and chronic diseases ....".* (P2)

The second subcategory was empowering nursing managers. Empowering future managers and replacing them is very important. *"... now our management is not agile ... we have 14,000 nursing managers ... these 14,000 managers at the level of head nurse, supervisors, university heads and ... are not managers who have passed the nursing empowerment course ... "*(P4).

The next subcategory is the recruitment and retention of nurses. Attracting and retaining nurses are one of the past, present, and future challenges of nursing. It seems that in the future it will be accompanied by challenges. *"Many of our nurses are migrating to other countries because of the low pay to our nurses,"* said one participant (P3).

Specialized nursing was the last subcategory. Many efforts have been made to create different categories of nursing and strengthen specialized nursing. However, it seems that one of the future challenges of Iranian nursing is the weakness of specialized nursing. *"... We have already said that nursing should be specialized. We should move towards specialization ...."* (P7).

## Discussion

The present study explore the future challenges of nursing from the perspective of experts. The future changes of Iranian nursing from the perspective of experts were classified into three areas including the challenge of centralized governance, the incompatibility of professional development with social demands, and the challenge of human resource management.

The first category was nursing governance. Governance capacity requires institutions, mechanisms, and policies and procedures to properly design and implement nursing and health policies (WHO, 2020). The participants stated that the position of nursing policy is incoherent and turbulent. Therefore, strengthening nursing governance in Iran is necessary. Strengthening the leadership and management capacity of nursing in the Middle East is an undeniable necessity. Hence, the World Health Organization has considered the creation and strengthening of a department or directorate in the Ministry of Health of these countries as a necessary task (WHO, 2016b). According to the organization, 53% of the 76 countries in 2020 had national programs to develop nursing leadership (WHO, 2020). A successful example of strengthening nursing leadership is the University of Technology Sydney, which was attended by more than 300 participants from 14 countries and 85% of managers in the leadership model had major career advancement (Homer, Copeland, & Rumsey, 2012). Therefore, the Ministry of Health should pay more attention to train the country's senior nursing managers.

Nursing policy and legislation are challenged in terms of the adoption of supportive laws, as well as the participation of nursing leaders, in the macro policies of the health system (Cheraghi, Ghiyasvandian, Aarabi, 2015). Two of the nursing supporting laws by the Islamic Consultative Assembly include the approval of the Nursing Services Tariff in 2007 and the participation of nurses in the "Comprehensive and Public Health Services System" in the Sixth Development Plan, neither of which has been implemented so far. The adoption of WHA54.12 in 2000 by the World Health Organization on the development of health systems by involving nurses and midwives in the framing, planning, and implementation of health policies at all levels indicates the international community's attention to the role of nurses(Fyffe, 2009). However, the All-Party Parliamentary Group on Global Health in 2016 notes that nursing leaders have not been sufficiently involved in decision-making and policy-making processes at the local, national, and international levels(APPG, 2016). Therefore, the nursing leaders in Iran should be further supported by the country's health authorities.

Nursing governance should closely monitor and evaluate various nursing activities. Nursing education activities in Iran are supervised by the Nursing Board (Cheraghi, Ghiyasvandian, Aarabi, 2015); however, monitoring and evaluation of clinical nursing services are done by the deputy of curative affairs. Therefore, it seems that despite measures such as issuing licenses for nurses' professional qualifications, the need for developing the supervisory role of the Deputy of Nursing over clinical services remains a serious challenge.

The last subcategory was cooperation and communication with other institutions of the health system. The inter-professional cooperation with other institutions and deputies of the Ministry of Health is one of the essential concerns for the development of nursing services. Nursing can be expanded into national and international programs such as primary health care, universal health coverage, and the development of home care by promoting this role. However, the inter-professional cooperation faces organizational, professional, and cultural challenges (Dahl & Crawford, 2018). Therefore, steps can be taken to expand national and international health systems programs by strengthening this role of nursing.

The next influential dimension for the future was the inadequacy of professional development with social demands. Demographic transition, its associated disability, long-term condition, and individuals at end of life increase the need for community-based nursing (Shahshahani, Salehi, Rastegari, & Rezayi, 2010). Futurists predict the expansion of diverse nursing specialties to control future changes (Grossman & Valiga, 2020). Two examples of Iran's efforts to expand community-based nursing include postgraduate community nurse education since 1986(Heydari, Rahnavard, & Ghaffari, 2017) and the establishment of chronic disease clinics in 2015(Deputy of nursing, 2016). However, nursing services in Iran have been, so far, provided mainly in the third level and hospitals, and the activities of Iranian nurses have not met the needs of society. One of the most important reasons for this failure has been the lack of a suitable position for community health nurses in the country's health centers.

Another challenge is home care. In many European countries, long term care services tend to take care of the home (WHO, 2012). Home care in the future should be more patient-centered, more integrated, with quality technology and specialized services (Van Eenoo et al., 2018). In 2016, the Deputy of Nursing announced the regulations for establishing a counseling center and providing nursing care at home (Deputy of nursing, 2016). Home care faces three cultural, infrastructural, and treatment-oriented challenges of the health system of Iran (Heydari, Rahnavard, & Ghaffari, 2017). Despite the improvements in the home care program, it seems that there is no coherent plan for the future of home care. Home care should be able to reduce referrals to hospitals.

Another serious challenge of the health system of Iran is not having intermediate centers. These care centers provide transitional services as a link between home care and hospital care. The most important intermediate centers include hospice, nursing homes, LTCFs, consult clinics. European countries have increased the number of care homes in the last ten years (Eurofound, 2017). However, home care centers in the health system of Iran is not very widespread. The Ministry of Health has also emphasized the need to establish these centers. The need for such centers in Iran is serious due to the increase in the elderly population and the Disability to care for these people and the lack of need for acute hospital care.

In the present study, experts emphasized the importance of using communication technologies such as health information technology, telemedicine, and mobile applications and the need for electronic nursing reporting. According to Wright and Honey's study, clinicians considered the use of telerehabilitation and teleconsultations technology to be effective in increasing their efficiency (Jane Wright & Michelle Honey, 2016). McCarth et al. also stated that electronic nursing documentation is effective in reducing rates of documentation errors, falls and infections, and saving time (McCarthy et al., 2019).

The third dimension of the future of nursing was the challenge of human resource management. The first subcategory was nursing education tailored to the needs of the community. According to experts, nursing education in the Iran should be adjusted according to the needs of society. In 2019, Schwartz outlined five general trends influencing the future of nursing education, including the elderly population and the burden of disease, the increasing prevalence of mental disorders, the complexity of patient care, and the need for inter-professional teaming, internationalization, and technological growth (Schwartz, 2019). Therefore,

nursing education in Iran should be modified based on these changes due to the serious changes and the burden of diseases in Iran.

The empowerment of nursing managers was another subcategory. According to experts, there are 14,000 nursing managers in Iran, but the ability of nursing managers in Iran, like other countries in the world, is a serious challenge. Despite their managerial responsibilities, nursing managers are selected as managers mainly based on clinical experience and expertise (Roche, Duffield, Dimitrelis, & Frew, 2015). On the other hand, nursing managers should spend 70% of their time on clinical tasks and less time on administrative tasks based on the Garling Inquiry (Garling, 2008). It seems that strategies such as improving training, support, and succession planning are effective in empowering nursing managers in Iran.

The next subcategory is the recruitment and retention of nurses. The World Health Organization has identified the shortage of nurses as the most important challenge in human resource management (ICN, 2006). Recruitment and retention of nurses in Iran face challenges, such as shortage of nurses, nursing development and improvement programs, job satisfaction, exhaustion, and burnout as well as factors affecting nurse retention(Zamanzadeh, V., Valizadeh, L., & Neshat, H., 2020). This challenge will be greater than other countries in the world due to the high estimation of the elderly population by 2030, as well as the current shortage of nurses and economic challenges and lack of expansion of nursing services in the community.

The specialized nursing was another topic of concern for experts on the desirable future of nursing. There are different approaches to develop these roles in different countries. However, the development of nurse roles faces cognitive, structural, organizational, and cultural barriers. In different countries, clinicians primarily worked in acute care settings, such as inpatient wards, intensive care units, and hospital-affiliated clinics (Bryant-Lukosius, 2010). Recently, the use of clinical nurses has expanded to outpatient care, long-term care, home care, and a variety of clinical specialties including oncology, cardiology, intensive care, gerontology, and mental health (Kilpatrick, et al., 2013). Recently, the Deputy of Nursing developed a roadmap for specialized nursing roles in Iran in collaboration with Isfahan University of Medical Sciences. Therefore, it seems that with the development of nursing in the community, and the creation of outpatient services, long-term care centers, as well as home care, and the need for specialized nurses will increase.

## Conclusion

The results of the present study showed that policymakers and nursing experts have a good insight into the future changes of the health system and the need for appropriate care and nursing in the face of these changes. Accordingly, the need for focus on the future needs of Iranian nursing can be used as a basis for the macro orientations of policymakers and nursing decision-makers in the health system of Iran. Nursing in the future faces three serious challenges, including the need for coherent governance with bargaining power with other institutions of the health system, the need for professional development to fit the social demands, and the challenges of human resource management.

# Declarations

## Consent for publication

Not applicable.

## Availability of data and materials

The data sets generated during the current study are not available for public reasons because are based on the statements of nursing policy makers; but they are available at the reasonable request of the author.

## Ethics approval and consent to participate

Study conducted is in accordance with the Iranian National Research Ethics Committee guidelines and regulations and approved by the ethics committee of Baqiyatallah University of Medical Sciences with No. IR.BMSU.REC.1396.930. All participants were asked to sign a consent form before interview.

## Competing interests

The authors declare that they have no competing interests.

## Funding

Not applicable.

## Authors' contributions

Study design: SB, MR, AE; Data collection: SB; Data analysis: SB, MRKR; Study supervision: MR, AE; Manuscript writing: SB, MR, MRKR, AE; Critical revisions for important intellectual content: SB, MR, MRKR, AE. All authors read and approved the final manuscript.

## Author details

[1] Health Management Research Center, Nursing Faculty of Baqiyatallah University of Medical Sciences, Tehran, Iran. [2] Shahid BeheshtiUniversity of Medical Sciences, Tehran, Iran. [3] School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran. [4] Behavioral Sciences Research Center, Nursing Faculty of Baqiyatallah University of Medical Sciences, Tehran, Iran

## Acknowledgements

# References

1. All-Party Parliamentary Group on Global Health (APPG). Triple Impact – how developing nursing will improve health, promote gender equality and support economic growth. London, UK: APPG. 2016.Availble at: from http://www.appg.globa lheal th.org.uk/

2. Bryant-Lukosius, D. The clinical nurse specialist role in Canada: forecasting the future through research. *The Canadian journal of nursing research.* 2010; **42**(2): 19-25.

3. Cheraghi, M. A., Ghiyasvandian, Sh., Aarabi, A. Iranian nurses' status in policymaking for nursing in health system: a qualitative content analysis. *The open nursing journal.* 2015; **9**: 15. 10.2174/1874434601509010015

4. Dahl, B. M. & P. Crawford. Perceptions of experiences with interprofessional collaboration in public health nursing: A qualitative analysis. *Journal of interprofessional care.* 2018; **32**(2): 178-184. 10.1080/13561820.2017.1386164

5. Deputy of nursing. Regulations for Establishing a Counseling and Nursing Home Care Center. National Document. 2016; Availble at: https://b2n.ir/626210

6. Deputy of nursing. Policies and Comprehensive Nursing Services of Islamic Repulic of Iran. 2019; Available at: https://b2n.ir/708338

7. Dye, C., Reeder, J. C., &Terry, R.F. Research for universal health coverage. Sci. Transl. Med. 2013; 5, 199ed13

8. Eurofound. Care homes for older Europeans: Public, for-profit and non-profit providers, Publications Office ofthe European Union, Luxembourg. 2017

9. Esmaeili, M., Dehghan-Nayeri, N., & Negarandeh, R. Factors impacting membership and non-membership in nursing associations: A qualitative study. *Nursing & health sciences.* 2013; **15**(3): 265-272. https://doi.org/10.1111/nhs.12012

10. Farsi, Z., Dehghan-nayeri, N., Negarandeh, R., & Broomand, S. Nursing profession in Iran: an overview of opportunities and challenges. *Japan journal of nursing science.* 2010; **7**(1): 9-18. https://doi.org/10.1111/j.1742-7924.2010.00137.x

11. Freed, P. E. & D. E. McLaughlin. Futures thinking: Preparing nurses to think for tomorrow. *Nursing education perspectives.* 2011; **32**(3): 173-178. 10.1891/1078-4535.19.1.50

12. Fyffe, T. "Nursing shaping and influencing health and social care policy." *Journal of nursing management.* 2009; **17**(6): 698-706. https://doi.org/10.1111/j.1365-2834.2008.00946.x

13. Garling, P. Special commission of inquiry into acute care services in New South Wales public hospitals: Inquiry into the circumstances of the appointment of Graeme Reeves by the former Southern Area Health Service, NSW Department of Premier and Cabinet. 2008

14. Grossman, S. C. & T. M. Valiga. The new leadership challenge: Creating the future of nursing, FA Davis. Ebook 2020

15. Hewison, A. Leading nursing beyond 2020-the challenge and the opportunity. *Journal of nursing management.* 2020; 28:767–770. 10.1111/jonm.13022

16. Heydari, H., Rahnavard, Z., & Ghaffari, F. Exploring the position of community-based nursing in Iran: a Qualitative Study. *International journal of community based nursing and midwifery.* 2017; 5(4):386-396.

17. Homer, C., Copeland, F., & Rumsey, M. Papua New Guinea Maternal and Child Health Initiative: monitoring and evaluation report. Sydney, Australia: DFAT and World Health Organization. 201

18. International Council of Nurses. The global nursing shortage: Priority areas for intervention. Global Health Workforce Alliance. 2006

19. Islamic Consultative Assembly. Law of the Sixth Five-Year Plan for Economic, Social and Cultural Development of the islamic Republic of Iran (1396-1400). 2016; available at: https://rc.majlis.ir/fa/law/show/1014547

20. Jane Wright, RN. & Michelle Honey, RN. New Zealand nurses' experience of tele-consultation within secondary and tertiary services to provide care at a distance. *Nursing Praxis in New Zealand.* 2016; **32**(2): 30.

21. Kilpatrick, K., DiCenso, A., Bryant-Lukosius, D., Ritchie, J. A., Martin-Misener, R., & Carter, N. Practice patterns and perceived impact of clinical nurse specialist roles in Canada: results of a national survey. *International journal of nursing studies.* 2013; **50**(11): 1524-1536. https://doi.org/10.1016/j.ijnurstu.2013.03.005

22. McCarthy B, Fitzgerald S, O'Shea M, Condon C, Hartnett-Collins G, Clancy M, et al. Electronic nursing documentation interventions to promote or improve patient safety and quality care: A systematic review. *Journal of nursing management.* 2019; **27**(3): 491-501. https://doi.org/10.1111/jonm.12727

23. Mirzabeigi, M. & Salarianzadeh, M.H. Description of comprehensive tasks of nursing levels and categories (managerial, general, specialized and primary). 2017; available at: https://b2n.ir/198483

24. Olsen, S. & J. McFarlin. The Tapestry model: an innovative strategy for futuristic strategic planning. *Aspen's advisor for nurse executives.* 1998; **14**(2): 1, 3.

25. World health organization. Home care across Europe: current structure and future challenges, World Health Organization. Regional Office for Europe. 2012

26. Polit, D. F. & C. T. Beck. Nursing research: Principles and methods, Lippincott Williams & Wilkins. 2004

27. Ritchie, J. & L. Spencer. Qualitative data analysis for applied policy research. *The qualitative researcher's companion.* 2002; **573**(2002): 305-329.

28. Roche, M. R., Duffield, Ch. M. Dimitrelis, S., & Frew, B. Leadership skills for nursing unit managers to decrease intention to leave. *Nursing research and reviews.* 2015; 5: 57–64 https://doi.org/10.2147/NRR.S46155

29. Schwartz, S. Educating the nurse of the future: report of the independent review of nursing education. 2019; Avalable at: https://www.voced.edu.au/content/ngv%3A86721

30. Shahshahani, M. S., Salehi, Sh., Rastegari, M., & Rezayi, A. The study of optimal nursing position in health care delivery system in Iran. *Iranian journal of nursing and midwifery research.* 2010; **15**(4): 150.

31. Shu-Ching, C., Yeur-Hur, L., & Shiow-Luan, T. Nursing Perspectives on the Impacts of COVID-19. 2020; *Journal of Nursing Research* 28(3): e85. https://doi.org/10.1097/jnr.0000000000000389

32. Upvall, M. J. & G. Luzincourt. Global citizens, healthy communities: Integrating the sustainable development goals into the nursing curriculum. *Nursing outlook.* 2019; **67**(6): 649-657. https://doi.org/10.1016/j.outlook.2019.04.004

33. Van Eenoo L, van der Roest H, Onder G, Finne-Soveri H, Garms-Homolova V, Jonsson PV, et al. Organizational home care models across Europe: A cross sectional study. *International journal of nursing studies.* 2018; **77**: 39-45. https://doi.org/10.1016/j.ijnurstu.2017.09.013

34. WHO. Global strategic directions for strengthening nursing and midwifery 2016-2020. 2016a; Available at: https://b2n.ir/821687

35. WHO. Strengthening nursing and midwifery in the Eastern Mediterranean Region: a framework for action 2016-2025, World Health Organization. Regional Office for the Eastern Mediterranean. 2016b; available at: https://b2n.ir/369775

36. WHO. State of the world's nursing 2020: investing in education, jobs and leadership. 2020; Available at: https://b2n.ir/788289

37. Zamanzadeh, V., Valizadeh, L., & Neshat, H. Challenges of human resources management in nursing in Iran: A qualitative content analysis. *Nursing Open.* 2020; **7**(1): 319-325. https://doi.org/10.1002/nop2.393