



Journal of Health Management and Informatics

# The Role of Nurses in the Covid-19 Pandemic: A Health Policy Approach in a Dead-end

Peivand Bastani<sup>1</sup>, Seyyed Mostafa Hakimmzadeh<sup>2\*</sup>, Sirus Panahi<sup>3,4</sup>, Mohammadamin Bahrami<sup>1</sup>

<sup>1</sup>Associate Professor, Health Human Resources Research Center, School of Management and Medical Informatics, Shiraz University of Medical Sciences, Shiraz, Iran

<sup>2</sup>PhD in Health Economics, Iran University of Medical Sciences, School of Public Health and Management, Tehran, Iran <sup>3</sup>Assistant Professor, Health Management and Economics Research Center, Iran University of Medical Sciences, Tehran, Iran

<sup>4</sup>Department of Medical library and Information Science, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran

#### **Abstract**

**Introduction:** This study aimed to assess the role of nurses in the Covid-19 pandemic and the way a nurse can help the health system in this regard.

Methods: This is a qualitative research using content analysis in 2020. The aim of this study was to elucidate the key role of nurses in the COVID-19 epidemic and the determinants of a professional nurse during an epidemic/pandemic crisis using virtual expert panels consisting of experts in the field of nursing, health care management, and psychology. Data were analyzed using the thematic analysis approach.

**Results:** The findings show that nurses in the coronavirus pandemic can have 4 main duties such as professional, spiritual and mental, health economics, and social roles. According to the present framework, the health economics, social and mental and spiritual roles together can determine and affect the nurses' professional role. These professional nurses can be able to provide necessary cares during COVID-19 pandemic.

Conclusion: In the crises like COVID-19 pandemic in which medical sciences alone cannot treat or alleviate the condition, as seen worldwide, among professional, spiritual and mental, health economics, and social roles, the spiritual and mental role may be the most important part a nurse can play.

**Keyword**: Nurses, Spirituality, Covid-19, Health Economics

#### Article History:

Received: 12 August 2020 Accepted: 19 September 2020

#### Please cite this paper as:

Bastani P, Hakimmzadeh SM, Panahi S, Bahrami MA. The Role of Nurses in the Covid-19 Pandemic: A Health Policy Approach in a Dead-end. J Health Man & Info. 2020; 7(3): 137-141.

# \*Correspondence to:

Seyyed Mostafa Hakimzadeh, School of Public Health and Management, Iran University of Medical Sciences, Tehran, Iran Tel: +98 9367235255

Email: hseyyedmostafa@gmail.com

#### **Background**

'arious people are working in the health system, 60% of whom are nurses (1). Nurses are effective not only in the treatment with an important role, but also at the forefront of dealing with various risks (2). The evolving role of professional nurses is intertwined with technology. Even though technology is integral to nursing, nurses provide the human touch and are still at the forefront of patient care (3). No matter what type of healthcare setting they work in, they have the most interaction with patients. Nurses assess and monitor the patients and relay information to other care providers. With the advent and spread of mobile technology and telemedicine, nurses are able to assist the patients in their communities and homes, in person or with the use of mobile technology (4).

Nurses in the recent corona pandemic have

devoted their lives to fulfilling their duty to battle the disease. They are a part of the medical community that is in direct contact with this ominous virus. Although this is the case, nurses must take care of not only the patients, but also themselves and their families in such a disaster. The role of assuring nurses in different dimensions is significant. A confident nurse should think and act differently and have a bird's eye view; she/he is not limited to details but is a bit prudent and can predict the future. She/he is confident in her/his ability and can convey a positive spirit to other friends, colleagues, and family (5).

The nursing profession has been praised in all religions and beliefs (6). Hope and experience are two factors that will make this profession global. The primary role of a nurse is to advocate and care for individuals of all ethnic origins and religious backgrounds and support them through health and

illness. However, there are other responsibilities of a nurse which is the same as recording medical history, collaborating with patient care's team, advocating for health and wellbeing of the patient, administering medications and treatments, operating medical equipment, educating the patients about the management of illnesses and providing support (2, 7-9). In a disastrous situation like the Corona pandemic, the role of nurses can be different. This study aimed to assess the role of nurses in this disaster and the way a nurse can help any health system in this regard.

#### **Methods**

This was a qualitative research applying content analysis in 2020. The purpose was to elucidate the key role of nurses in the COVID-19 epidemic and the determinants of a professional nurse during crisis. For this purpose, three expert panels were held virtually via video conference technology. The research population included nurses, faculty members and managers in the fields of nursing, health care management, health economics, health policymaking, psychology, and sociology with at least 5 years of experience and high tendency to collaborate. Table 1 shows the characteristics of the participants.

The group interview guide was developed during an initial meeting between the research team members and a review of the subject literature, and one of the researchers (SMH) as facilitator used these specialized questions to purposefully collect the maximum information in the managed time. The session lasted for two hours and consisted of three specialized sessions. All sessions were recorded by a tape recorder with the participants' voluntary consent.

The approach suggested by Graneheim and Lundman (2004) was used for data analysis (10). In this regard, the entire interview transcript was considered and read line by line several times; after data familiarization, open coding was processed by two of the researchers separately. Then, the initial

codes were discussed and finalized by the whole team members and the main key roles of the nurses during COVID-19 epidemic were obtained. At last, for better understanding, the main determinants of a professional nurse during the epidemic/pandemic crisis were illustrated and the relationships among the determinants were clarified.

#### Result

Results show that the extracted roles of nurses in the coronavirus pandemic are classified into 4 main categories as follows:

#### 1- Professional Roles

Enhanced capacity to respond to disasters and other public health emergencies will require a nursing workforce that is clinically experienced and holds the knowledge and skills necessary to respond with confidence and authority. These roles include:

- Collaborating with healthcare professionals to effectively perform treatments and procedures in the coronavirus pandemic
- Choosing the appropriate medical specialization for older patients with multifaceted health conditions such as diabetes, obesity, heart problems, kidney disease, and dementia.
- Preparing specific supportive packages for highrisk groups like the elderly, children, those with system immunity deficiency, etc.

About the professional role of nurses, one interviewee said:

"A broad collection of guidance for nursing practice, education, policy, and research, as well as implementation difficulties, should be abstracted in every hospital." [P2].

Another expert added:

"Catastrophe Preparedness Guidelines for Nurses are based on the four aspects of disaster administration: mitigation, planning, response, and recovery. The four stages are recognized throughout the calamity preparedness community as the standard comprehensive approach to disaster management" [P3].

**Table 1:** The general characteristics of the participants

Participants` position	Number
Faculty members in nursing	2
Faculty members in health management science	2
Faculty members in health economics	1
Psychologists	2
Health care managers	2
Policymakers of the Ministry of Health and Medical Education	2
Directors of university of medical sciences.	2

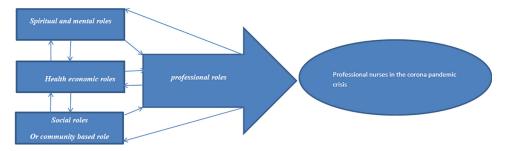


Figure 1: The main determinants to achieve professional nursing during epidemic/pandemic crisis

## 2- Spiritual and Mental Roles

Spiritual roles of the nursed can be mentioned as follows:

- Addressing a patient's cultural, spiritual, and mental needs
- Paying attention to the specific needs and preferences of the patients due to their religion, beliefs, gender, or age.
- Applying religious and educated volunteers for cooperation with medical practitioners, psychologists, and psychiatrists in hospitals, health centers, or even schools and universities
- Conveying a positive spirit to other friends, colleagues, and family

One interviewee said:

"Find a trusted nurse with whom to share your spiritual, moral, and religious conflicts. Religion has a calming effect on patients; for example, when people feel that suffering caused by sickness is a virtue from God and every one can make a virtue of necessity, in ways that alleviate shame, guilt, fear, self-blame, and self-disgust, making it more likely that such tranquility will be kept private" [P5].

# 3- Health Economic Role

Through this role, nurses are expected to know how to use medical equipment; especially when there is a shortage of masks and gloves around the world in the present coronavirus, they can make consumption economical.

One interviewee said:

"Nurses can affect the work environment in four aspects- workload, supportive supervision, supplies and equipment, and respect from the community and the health system—that affect the productivity of nurses" [P10].

Or elsewhere:

"We propose that when nurses have a manageable workload in terms of a realistic number of tasks and clients, an organized manner of carrying out these tasks, a reasonable geographic distance to cover, the needed supplies and equipment, a supportive supervisor, and respect and acceptance from the community and the health system, they can function more productively and contribute to an effective health economic strategy" [P8].

#### 4- Social Roles

The social roles of nurses are categorized as follows:

- Addressing their family who are vulnerable to the coronavirus epidemic
- Providing timely accurate information and trying to increase the general trust of the community
- Encouraging the patients to direct and manage the contents of the media with emphasis on social networks to manage the public fear and stress
- Not considering rumor and only following the reports by trusted organizations to prevent mental harm.

In the area of social roles, one of the interviewees believed:

"It is crucial for nurses to consider social roles such as family and??? personal safety while at work. Secondary matters were primary requirements such as food, water, sleep, shelter, and rest. The level of commitment to providing care during emergencies varies considerably"  $[P_9]$ .

Figure 1 shows that these 4 main categories are proposed as the main determinants to achieve professional nursing during epidemic/pandemic crisis. Three categories of spiritual and mental roles, health economics role and social roles have a mutual relationship and all of these 3 categories have an effect on the nurse professional role that determine a professional nurse during epidemic/pandemic crisis.

## Discussion

The results of the present study show that four main categories of spiritual and mental, health economics, social and finally professional roles can lead to defining a professional nurse during pandemic/

epidemic outbreaks. The importance of these results has become more obvious when considering that nurses are able to effectively respond to disastrous situations (11). And this response can really determine the quality of health services and affect health care outcomes.

Grochtdreis (2016) has also confirmed that nurses are considered as the key players in emergency response with many various tasks. They also emphasized the personal and professional preparedness of the nurses (12).

According to the present results, the knowledge and skills of the nurses must be considered a necessity of their professional role to respond with confidence and authority during the crisis. Other studies have emphasized the nursing education and training in disaster management (11, 12). In spite of them, Nemati (2020) has emphasized that WHO and the Ministry of Health must still provide more information for the medical staff, specially the nurses for better control of the infectious disease as well as COVID-19 (13). Thus, all these findings emphasize the significance of specialized training of the nurses and professional skills and education more than ever.

About the mental role of nurses as another finding of the study, it is important to consider that it can be a bipartite issue. Pourvakhshoori (2017) has claimed that the nurses encounter some mental considerations at the time of disaster, for instance their own conflicting emotions and their concern for their own families (14). At the same time, it is expected that a nurse is able to give mental support to patients and their families during the crisis that all need a comprehensive preparedness of the nurses and additional systemic support during the disasters.

Moreover, evidence has shown that those nurses with better preparation and a more complete concept of moral implications of care during disasters can better deliver the health care (15). It would be obvious that a nurse with a sense of stress, anxiety or fear cannot play a professional role, especially the scope of mental and spiritual roles. In this regard, Sun et al. (2020) described the psychological experience of nurses caring for COVID-19 patients into the themes of negative emotions in early stage including fatigue, discomfort, hopelessness, and self-coping styles including psychological and life adjustment, altruistic acts, team support, rational cognition and self-reflection (16).

The social role, as the third role determined in this study, is considered very important at the time of crisis. Although this role needs to be customized according to different settings, it is clear that a strong relationship between the nurses and the community can be considerable. These nurses can play an important role in improving the community's health literacy, disseminating the right information as well as mental care and creating positive morale in the whole community.

At last, the present results determined the health economic role of professional nursing during disasters. It seems that it is a new role that a professional nurse can take over. According to the special condition of the country because of the economic sanctions imposed on the government and limited recourse of the health care system, this role can be more significant. In this regard, a proposed policy has briefly stated that nursing is a fundamental driver of both outcomes and costs in most health care systems through the innovative provision of services based on the coordination, teamwork, and appropriate leadership (17). All these roles together can be effective for the nurses around the world to overcome the new pandemic (18).

#### Conclusion

There are 4 main roles a nurse can take in the exposure of the Covid-19 pandemic. Among professional, spiritual and mental, health economics, and social roles, in the crisis like Covid-19 the spiritual and mental role may be the most important place a nurse can have. Spirituality can also affect other roles like professional and social places as a spiritual nurse with mental health can play his/her more prominently than a depressed one.

#### Limitations

In different circumstances, the priority of the mentioned roles can be different; providing a pragmatic model for the spirituality role of nurses in the Covid-19 can be a need for further research.

## **Ethics Approval and Consent to Participate**

The informed consent was obtained electronically from all the participants. The proposal is approved by the ethics committee of Shiraz University of Medical Sciences with the ID of IR.SUMS.REC.1399.396.

## **Consent to Publish**

Not applicable

## **Availability of Data and Materials**

While identifying/confidential patient data should not be published within the manuscript, the datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

## **Funding**

There was no funding.

## Acknowledgement

The authors would like to thank all the participants in the study. They would also appreciate Basic Science Research Center for conducting this study.

## **Authors' Contributions**

PB has designed the study. SMH collected the data and prepared the first draft of the article. SP and MAB finalized the article.

Conflict of Interest: None declared.

#### References

- 1. Labrague LJ, Hammad K, Gloe DS, McEnroe-Petitte DM, Fronda DC, Obeidat AA, et al. Disaster preparedness among nurses: a systematic review of literature. *Int Nurs Rev.* 2018;65(1):41-53. doi: 10.1111/inr.12369.
- Edmonson C, Sumagaysay D, Cueman M, Chappell S. The Nurse Leader Role in Crisis Management. *J Nurs Adm.* 2016;46(9):417-9. doi: 10.1097/NNA.0000000000000367.
- 3. Wallace M, O'Shea E. Perceptions of spirituality and spiritual care among older nursing home residents at the end of life. *Holist Nurs Pract*. 2007;21(6):285-9; quiz 90-1. doi: 10.1097/01. HNP.0000298611.02352.46.
- 4. Samuel P, Griffin MTQ, White M, Fitzpatrick JJ. Crisis leadership efficacy of nurse practitioners. *The Journal for Nurse Practitioners*. 2015;11(9):862-8.
- 5. Putra A, Petpichetchian W. Public health nurses' roles and competencies in disaster management. *Nurse Media Journal of Nursing*. 2011;1(1):1-14.
- 6. Vance DL. Nurses' attitudes towards spirituality and patient care. *Medsurg Nursing*. 2001;10(5):264.
- 7. Chapman K, Arbon P. Are nurses ready?: Disaster preparedness in the acute setting. *Australasian Emergency Nursing Journal*. 2008;11(3):135-44.
- 8. David H, Martinez-Riera JR, Acioli S, Costa M. Perceptions of Spanish nurses on economic crisis and the impacts on health care system. *Rev Bras Enferm*. 2020;73(3):e20190283. doi: 10.1590/0034-

- 7167-2019-0283.
- 9. Geolot D, Alongi S, Edlich RF. Emergency nurse practitioner: An answer to an emergency care crisis in rural hospitals. *Journal of the American College of Emergency Physicians*. 1977;6(8):355-7.
- 10. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today.* 2004;24(2):105-12. doi: 10.1016/j. nedt.2003.10.001.
- 11. Achora S, Kamanyire JK. Disaster Preparedness: Need for inclusion in undergraduate Qaboos nursing education. Sultan Univ Med J. 2016;16(1):e15-9. doi: 10.18295/ squmj.2016.16.01.004.
- 12. Grochtdreis T, de Jong N, Harenberg N, Görres S, Schröder-Bäck P. Nurses' roles, knowledge and experience in national disaster pre-paredness and emergency response: A literature review. South Eastern European Journal of Public Health (SEEJPH). 2016.
- 13. Nemati M, Ebrahimi B, Nemati F. Assessment of Iranian nurses' knowledge and anxiety toward COVID-19 during the current outbreak in Iran. *Arch Clin Infect Dis.* 2020;15(COVID-19):e102848.
- 14. Pourvakhshoori N, Norouzi K, Ahmadi F, Hosseini M, Khankeh H. Nurse in limbo: A qualitative study of nursing in disasters in Iranian context. *PLoS One*. 2017;12(7):e0181314. doi: 10.1371/journal.pone.0181314.
- 15. Reinert KG, Koenig HG. Re-examining definitions of spirituality in nursing research. *J Adv Nurs*. 2013;69(12):2622-34. doi: 10.1111/jan.12152.
- 16. Sun N, Wei L, Shi S, Jiao D, Song R, Ma L, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am J Infect Control*. 2020;48(6):592-8. doi: 10.1016/j. ajic.2020.03.018.
- 17. Lindrooth RC, Yakusheva O, Fairman JA, Naylor MD, Pauly MV. Increasing the value of health care: The role of nurses. 2015.
- 18. Mohammadzadeh N, Shahriary M, Nasri E. Iran's success in controlling the COVID-19 pandemic. *Infection Control & Hospital Epidemiology*. 2020;41(11):1359-60. doi: 10.1017/ice.2020.169.