Role model nursing leaders in COVID-19 crisis

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ABSTRACT

Background Applying the principles and skills of management, including planning, organising and leadership skills, will greatly help to improve the quality of nursing manager duties. This is even more important during crisis management, such as the COVID-19 crisis. The objective of the present study was to express the experiences of nursing managers in the COVID-19 crisis.

Methods A qualitative conventional content analysis approach was used to discover the nursing leadership style in the COVID-19 crisis. The present study was conducted in one hospital in Tehran, Iran. 20 Iranian nursing managers in all nursing management positions such as head nurse, matron and supervisor were interviewed. Semi-structured interview was conducted at one hospital in Iran, using reflective and open-ended questions. Interviews were audio recorded and transcribed. The study was carried out in 2020 while data saturation occurred, no new categories or codes have emerged and the study questions were answered. Credibility and conformability were established through member checking. The report of the analysis was returned to the participants in order to get the assurance that the researchers had portrayed their real world in codes and extracted categories.

Results Four main themes emerged from data analysis including 'managers as role model', 'full responsiveness', 'being in constant challenge' and 'post disaster growth'.

Conclusion Nursing management is one of the activities that the manager must be constantly aware of the activities of his subset. This requires a constant presence in the workplace and communication with nursing staff. Also, in times of crisis, the manager, in addition to having scientific ability, must also have sufficient experience. These two factors will lead to crisis management. Also, training staff and managers in crisis management is one of the most important issues in nursing management.

BACKGROUND

Management, in addition to managing organisations and reforming its structure and other main components, namely individuals in a way, can be considered one of the most important yet complex sciences. This is also very important in nursing and nursing management because nurses, especially nursing managers, are in contact with many people and eventually proper management will lead to better results for patients.[1] The tortuous role of nursing managers makes it important to guide the responsibility of professional nurses in achieving quality patient care outcomes. On the other hand, improving the quality of care and increasing job satisfaction of nurses and patients depend on the strong leadership and management of nursing.[2] Considering the issues arising in the field of nursing management, applying the principles and skills of management, including planning, organising and leadership skills, will greatly help to improve the quality of nursing duties. Capable nursing managers, by creating a sense of self-confidence and empowering nursing staff, help them achieve organisational goals. This issue requires training and empowerment of nursing managers.[3] Leadership and management styles in different organisations as well as nursing can vary depending on the conditions and changes in the organisation. Using the right leadership style and management can solve the problems of a team in the best possible way. In the nursing system, managers must plan to deal with a challenging situation that is constantly changing and complex, and sometimes has turmoil and crisis, and use the best leadership and management skills.[4] In their study, Mossadeghrad et al summarised the performance of nursing managers in eight areas of decision-making, planning, organising, coordination, leadership, communication, budgeting and control. The results showed that the head nurses received the highest score in organisation and the lowest score in budgeting. Also, the relationship between managers' characteristics and management training was significant for them (p<0.05).[5]

Today's world is experiencing a variety of events, crises and diseases. These crises threaten human physical and spiritual life despite scientific advances; humans have not yet been able to overcome these crises completely. Hospitals and medical staff are one of the first and most important factors in dealing with crises due to their working nature.[6] Due to the emergence of crisis and changing conditions, management in the field of nursing faces various challenges. One of these crises is the spread of epidemics such as COVID-19 19 disease. Nurses are one of the groups that are at the forefront of health and social care in the most difficult situations to deal with this disease. Nurses and nursing managers in this crisis are under the most severe mental and physical stress 24 hours a day, 7 days a week. The widespread and increasing prevalence of this disease and the excessive request of patients for treatment and care, nursing and management of this issue have faced many challenges.[7] In many parts of the world, such problems have been overcome by strengthening the nursing management and leadership system. Nursing leaders and managers in these cases take steps to solve the problem by expressing courage and transcendent insight. Other roles of nursing managers in times of crisis are the role of counsellor, motivator, supporter and collaborator who also use these characteristics to guide nursing staff.[8] Employment and crisis management by nursing managers in the corona crisis is one of the most important and vital issues in the healthcare system. Some studies have raised issues related

to capacity building, use of new infrastructure, recruitment, prevention of staff burnout and so on. These included the use of new infrastructure, the principles of proper triage, and the use of the capacity of hospital staff and colleges, nursing students and the deployment of an advanced triage physician.[9] [10] Providing end-of-life care to critically ill patients, the stress of nurses' direct exposure to the coronavirus and their family being at risk, the feeling of being away from family and friends, and the psychosocial stress are other issues that nurses have faced. These are just some of the goal-setting shareware that nurses can use to improve their performance.[7] [11] [12] Martland *et al* considered the division of duties and nursing affairs, daily supervision and even at shorter distances on nursing affairs, holding comments sessions by staff and middle managers and helping effective and useful decision-making of medical staff as important suggestions for nursing managers.[13] Nursing managers should pay adequate attention to nursing staff when stress arises from work, especially in times of crisis.[12] Kermanshahi *et al* showed that managers with their effective behaviours can increase staff satisfaction and improve the responsibility and productivity of the forces under their control.[3]

Due to the special conditions of nurses in the corona disease crisis and the difficult tasks of managers to solve the problems faced by nurses, the present study was conducted with the aim of explaining the experiences of nursing managers in the COVID-19 crisis.

Context of jihad and martyrdom

More than 98% of Iranian people are Muslims. The religion of Islam has 10 main pillars, and jihad is one of them. Jihad means sacrificing yourself for the sake of god. People who die during the jihad are called martyrs. Martyrs are much respected in our religion. For example, in the holy *Quran*, God states that the martyrs are always alive. After the COVID-19 pandemic, the Iranian supreme leader announced the healthcare working during the pandemic as jihad and those who died as martyrs.

METHODS

A qualitative conventional content analysis approach (Graneheim and Lundman[14]) was used to discover participants' experiences during 2020 in a military hospital in Tehran, Iran. The study population was Iranian nursing managers in all nursing management positions including head nurse, matron and supervisor. To enhance the maximum variation, managers from both genders with different work experiences and different educational levels were selected. The recruitment process included researcher presence in the field and description of the study for nursing managers, and then choosing the participants based on

inclusion criteria. In total, 20 nursing managers were chosen based on purposive sampling technique (table 1).

Managers with at least 1 year of job experience, who were fully engaged in COVID-19 cases, were requested to participate in the study. The first interview was done by an emergency head nurse who had more field experience and was the first manager who was engaged in COVID-19 crisis. After that, based on the available data, other participants were invited to participate in the study.

Semi-structured interviews were used to collect the data. Interviews were conducted in a convenient place for the participants and mean time for interviews was 45 min. After several warm-up questions, the interviews were started with an open-ended question which they were asked to narrate in as much detail as possible about their experiences. The interviews started with a general question, for example, "Based on your experiences, explain the crisis of COVID-19, how you engaged with it?" Questions used in this study are generated from literature review, a short-term field work and also the experience of the research team. Also, we used constant comparison method during the data gathering process. We used an interview guide in each interview. This guide helped us to better manage the interview process. This guide was only a framework, and during the data gathering process, we changed the questions and their priorities. As the study progressed and categories were formed, the subsequent interviews were directed in order to clarify the main categories and their connections. When needed, the probing and explanatory questions were used for additional clarification to the answers given by participants. At the end of the interview, participants were asked to add any other data that they think will help the research process. The researcher's telephone number and email address were provided to them, and they were asked to give any complementary data. Along with the text of the interview, the participants moods and characteristics such as laughter and facial expressions were also noted.

The first author of this article conducted the interviews. The interviews were transcribed verbatim and the transcribed data were reviewed several times to obtain its full understanding. First, the text was reviewed and meaning units were abstracted and labelled with codes. The data were divided in meaning units, then coded, and arranged in different subcategories and categories based on their similarities and differences. Consensus with all of the researchers was achieved with a continuous discussion about the process of coding and categorising the data. The categories emerging were further reviewed and compared in order to identify superordinate themes. MAXQDA V.20 software was used to help in the analysis and classification of the data. From data analysis, we obtained 4 categories and 16 subcategories. We used constant comparative analysis method for better management of data. This means that data gathering and data analysis were done simultaneously. After each interview, it was transcribed and coded and then categorised. The next data were collected based on the analysed data. After each interview and based on analysed data, the questions of the next interview were arranged and discussed between the research team. This means that the data gathering process was a flexible process. Sampling was continued until data saturation. Data saturation occurred, no new categories or codes emerged, and the study questions were answered.

Credibility and conformability were established through member checking. The report of the analysed data was returned to the participants in order to get the assurance that the researchers had portrayed their real world in codes and extracted categories. The peer-checking method was employed in improving the dependability of the findings. Prior to commencing the study,

Table 1	Demographic information of the interview	
Variable		
Gender	Male	13
	Female	7
Age	42.45 (5.75)	
Education	MSc	11
	BSc	9
History of attending crisis manoeuvres	Yes	15
	No	5
History of crisis	Yes	20
	No	0

the authors purposefully avoided reviewing articles that might influence the processes of data gathering and analysis. Lastly, the transferability of the study was confirmed by precise description for other researchers to be able to carry out a similar study.

ETHICAL CONSIDERATIONS

Prior to the study, written informed consent was obtained and all participants were informed verbally about the aim of the study and that they could refuse to participate or withdraw from the interviews at any time. In addition, recording of interviews was done only by the participants' permission. They were informed that the audio files would be deleted after 5 years. In order to maintain the anonymity of the participants, numerical codes were used instead of names and only the main researcher conducted the interviews.

RESULTS

Four main categories emerged from data analysis including 'managers as role model', 'full responsiveness', 'Being in constant challenge' and 'post disaster growth'.

Managers as role model

The first theme of this study was 'managers as role model'. Managers were continuously engaged in problem solving and frequently attended medical wards and encouraged their colleagues. They were trying to be role models for other colleagues. They were role models for providing devoted services. The culture of jihad and martyrdom was prevalent among colleagues and managers, and they believed in spirituality and divine victory. This theme is composed of categories of devoted service and jihadi spirit, direct presence of managers, sense of empathy and positive spirit, spirituality and divine victory, culture of jihad and martyrdom.

Direct presence of managers

Nursing manager and his successor were in hospital full time. Dean and manager of hospital also were in hospital all the time. Sometimes they were in the hospital for several consecutive days. On normal days, they were at work until the last hours of day. The hospital manager was present full time and even answered the staff with his mobile phone. Head nurses were pioneers for doing the dangerous procedures. Lack of equipment was followed up full time. In cases where there was additional pressure on the staff, the head nurses provided more assistance. Head nurses visited the patients to reduce the feeling of being isolated in patients and to maintain the spirit of the staff.

Interviewee 2: I was the first to enter the ward and I was present at all the visits… This caused the staff to be present as well.

Devotedly service and jihadi spirit

Both the hospital administrators and volunteers were present at work with the spirit of jihad. Presence of the volunteer staff was a positive incentive for staff to continue their jobs. Managers tried to maintain the morale of the staff by playing positive videos of jihadi culture. There is a growing culture of self-sacrifice in our country.

Interviewee 4: A co-worker from Isfahan called me and said I want to come and help… I came to our emergency ward for several days… To work for about a month.

Spirituality and divine victory

Managers and nurses repeatedly thanked God for His help to solve the problems. Nursing manager and supervisors had spirituality in their intentions and actions. They relied on God. They linked the solving of various hospital problems, including lack of human resources and successful management, to divine help.

Interviewee 4: God helped… and new nursing staff to come…

Full responsibility

The second concept of this study was 'full responsibility'. This concept consisted of four main categories: staffing, disaster management, supply of personal protective equipment (PPE) and psychological management.

Staffing

One of the most important issues in the corona disaster was human resource management. Perhaps the most important issue that nursing managers should have managed well was human resources issues. With the onset of the crisis, some nurses refused to be at work, and a number of staff gradually became ill and took sick leave. Also, the allocation of existing staff was not done well. Inpatients mostly needed intensive care beds and we had few skilled ICU staff. Intensive care units were set up in non-specialist locations, such as general wards. Short-term education was started for empowering staff. Nursing students were used in screening clinics as well as general wards. Retired volunteer nurses were re-employed and a large number of volunteers came to the hospital for help. The methods of division of labour were also challenging, which was according to the conditions of the departments; different methods were used in different departments.

Interviewee 6: Our suggestion was to have a 24-hour shift and 48 hours off… Who can both recover and reduce patient exposure.

Supply of PPE

One of the main issues extracted from this study was the supply of PPE. Due to the fact that hospitals did not already have enough storage for PPE and some devices such as overall and respirator are not routinely used and were not stored, the provision of PPE was one of the important issues.

Interviewee 8: ….We did our best to provide the n95 m750 mask now that, thank God, the hospital itself has set up a production line…

Disaster management

Disaster management was very important. Despite the fact that we had enough time to be prepared and there was an opportunity to respond, there was no necessary preparation to respond and we were surprised. Despite the existence of a hospital incident command and numerous manoeuvres, it did not have much effect on the performance and readiness of the response. We had to programme for management, from the supply chain to surge capacity and increasing the number of beds. In addition to increasing the possible capacity, a hospice was established at the university. We did not have a plan B because from the beginning, we considered the easiest scenario, that is, reducing the number of patients, and so on. Changing the function of the wards, creating a screening room, increasing the ICU beds and providing human resources were the most important measures.

Interviewee 11: …. the number of our beds, in intensive ward was about 40, which we increased to nearly 100 beds, at the height of

the Corona crisis and providing the necessary personnel for this was a big challenge. …

Psychological management

The fear of getting infected and contagion to family members and other colleagues was one of the most important issues. In some cases, nurses were diseased and admitted to their wards as patients. Also, in some cases, we had the death of medical staff. Stress and constant fatigue were the hallmarks of this long-term crisis. Also, the staff did not know enough about how to manage the problems. The most important strategies were the full-time presence of managers and supervisors and inspiring other team members. In wards where the supplies were not enough, it caused dissatisfaction and sometimes staff sit-ins. The first step in supply chain was rationing and then solutions to reduce equipment consumption were thought. Prioritisation was performed if necessary. Sometimes when there was a problem in the supply chain, frequent follow-up was done. Eventually, the hospital established a workroom for the production of masks and PPE with a standard and approval, which made the hospital self-sufficient.

Interviewee 9: …. We are not afraid of our own death, our problem is that we become carriers and our families take sides…

Being in constant challenge

Hospitals were in critical condition. Hospitals were not prepared to deal with it and nursing managers were at the frontline. All challenges and problems were first referred to these managers. They experienced numerous problems including treatment protocols and how to comply with them, and lack of information in employees, conflict management and numerous care delivery problems. None of these challenges had a specific solution, and in most cases the work that was proposed as a solution would create a new challenge. This theme had four main categories including conflict management, improper treatment process, unfavourable caring context and reward and punishment.

Unfavourable caring context

Nursing managers were constantly challenged with different issues including hard work of nurses, lack of PPE, nurse's infection, staff death, overcrowding in hospitals, sit-ins, worries for family members and their transfer, lack of human resources and obligation to comply with the plan of caring the patients with same gender. Decisions needed to be made momentarily to address the problem.

Interviewee 2: …. But it was a big defect, you see, for example, now if the nursing care score of the disease is 100, then it was 50… Both because of the lack of manpower and fear and lack of knowledge about treatment and care…

Reward and punishment

Personnel were encouraged spiritually and financially because of their presence in the COVID-19 crisis. The challenge was financial encouragement. Because there was no specific method for offering rewards, the rewards were distributed unequally, and until the end of disaster, staff that received less financial rewards without special justification were dissatisfied. These staff sometimes attributed their low qualification for being ignored. Punishment was also one of the issues that had to be seen during the work. Some personnel did not attend come to work without notice or left. Several sit-ins took place, all of which challenged

the manager, who, as usual, could not use punitive tools. If someone was punished, it would lead to leaving the job, and not punishing would challenge the managers.

Interviewee 6, 8: … But well, every series of incentives that entered the system was definitely positive, meaning that the nursing staff compared themselves to other hospitals … and they were very happy…

Improper treatment process

Managers faced the challenge of lack of transparency of instructions due to the novelty and lack of knowledge of the disease. Staff did not have enough information on how to protect themselves and provide care. There was a lot of inconsistency in the treatment process and it was not clear who was directly responsible for the patient. Medical visits and orders were not carried out in a coordinated manner. The ambiguity of the treatment protocol caused all nurses to be involved in research in some way. Due to the lack of control, sometimes one patient was present in several research projects at the same time.

Interviewee 10: …. It should be noted that a social panic was created for our staff and the whole community about this issue and it was really true because the methods of transmitting the disease were not really clear…"

Conflict management

Managers had to make decisions about problems at the moment. Sometimes they had to open a new ward. Patients in the previous ward were evacuated. Sometimes they had to resolve the conflict of sit-down strike directly. They had to solve problems that were in conflict with the interests of the organisation and the people. They had to intervene directly in different issues including the crowding of departments such as the emergency room, infection of nurses, dismissal of some colleagues, the lack of specialised personnel in some departments and the lack of staff. They usually used strategies such as avoidance. The manager also faced a severe challenge between staff rights and the rights of the organisation.

Interviewee 6: …. But in the field of intensive care, we faced some challenges and found a shortage of ICU staff…. …The supply and maintenance of personal protective equipment was a challenge for us… Another challenge was employing non-nurse work, such as anesthesia work and midwifery work in the operating room, which we really had to do.

Post-disaster growth

The COVID-19 crisis also had some opportunities. One of these opportunities was improving the nursing image in society. Many managers also gained valuable experience in dealing with crisis. Nursing students gained invaluable experience in how to work and gained some independence. Also, this disaster helped top managers for better identification of managers and staffs and their abilities that were not assessable in routine situation. In many cases, a lot of creativity was shown by the staff. Many hospital facilities and infrastructure were renovated with government support.

Interviewee 13, 2, 6: …. The nursing students who were introduced to us helped a lot…. …The first week of some of our shifts passed with half the forces…

DISCUSSION

The four main themes of the present study were managers as role model, full responsibility, being in constant challenge and post-disaster growth.

As the results showed, one of the most important roles of nursing manager is to be a role model. The present study matches with the study of Silva, Mezan and Hussain role model of being a nursing manager.[15–17] Nursing managers can be a role model and mentor for their colleagues and subordinates according to their performance. As nursing managers, they must use all their abilities. In relation to the acquisition of management skills and abilities, especially communication skills and the creation of a supportive environment for nursing staff lead to role modelling.[15 18] One of the important tasks of managers in nursing is to acquire the ability to become a role model. Nursing staff will be motivated by seeing the managers who work alongside them and will be actively involved in organising and arranging departments, providing equipment, setting work environment conditions, writing orders and so on. This becomes especially important in times of crisis and unforeseen events such as the COVID-19 epidemic. In times of crisis, the best managers are the ones who, with proper performance, show themselves as suitable and useful management models.[16] A good manager must have pre-determined goals and tactics to solve problems and at the same time acts as a good role model for subordinates and staff.[15]

Nurse managers need to proactively examine ways of supporting staff, developing positive working environments and encouraging ethical behaviour. It will require charismatic, compassionate and inspirational leaders who can support staff through respect, empathy, role modelling and genuine conscientiousness, while encouraging integration of shared values and ethical behaviours.[19]

The results of the present study showed that nursing managers also stated that they are deeply influenced by the spirit of martyrdom and jihad in themselves and their subordinates. This issue was emphasised by almost all managers participating in the present study. From this perspective, the present study is similar to the study of Sergeant. In his study, he states that having a proper and healthy mood is one of the important and influential points on the performance of nursing staff.[20] However, having the spirit of martyrdom and self-sacrifice is different in different cultures.

As Aquilia states, leadership in a faith-based health system enables the nurse leader to find inspiration in the mission. By believing in the Gospel, he promoted his body and soul and the health of the society entrusted to us. So believing Christians are also more successful in service.[21]

Another theme was accountability. One of the important duties of nursing managers is to be responsible for solving problems. The results of the present study also showed that especially in crisis situations, the responsibility of nursing managers can help solve problems. Morsiani in his study states that the nursing manager is a person who responds to the requests and problems of his organisation during day and night (24 hours). This task includes flexibility, trying to improve staff science, direct supervision of staff, helping to come up with innovative ideas and improving communication skills. This is included in the responsibilities of the nursing manager.[22] The present study is in agreement with Morsiani's study of nursing manager's responsibilities. The present study also showed that the nursing manager can manage the crisis with continuous supervision and effective communication with subordinates and also support them psychologically by encouraging. Laukkanen states in

his study that the nursing manager is responsible for solving problems related to his or her work. According to him, nursing director solves work-related problems by discussing, innovating, encouraging and participating in organising, decision-making and intervention. In this regard, the discussion of teamwork and management in matters of nutrition and diet therapy, as well as cooperation with social workers has been emphasised.[23] In this regard, the present study is in agreement with his study. In the present study, nursing managers were motivated by a sense of responsibility for crisis resolution and solving problems as much as possible with inter-professional cooperation. The use of jihadi forces and social workers and sick helpers is an appropriate example.

The issue of providing PPE is another area of responsibility for nursing managers. Liu in his study showed that in the COVID-19 19 crisis, one of the important tasks of nursing managers was to provide PPE.[24] By doing this, the manager showed his support and protection of the staff. The present study conforms to Liu's study from this perspective. Although at the beginning of the COVID-19 epidemic, PPE was not available to all nursing staff, it was soon supplied and delivered to staff. In the present study, nursing managers protected nursing staff against coronavirus by rapid forecasting and providing equipment and tools needed for the crisis. However, in this case, allocating sufficient budget and planning to prepare and anticipate is important.

Another theme of this study is being in constant challenge. In the present study, factors such as lack of manpower in some cases, poor care and inappropriate treatment process and conflict management were listed as challenges for managers and nursing staff. In similar studies,[25 26] issues such as the decision to leave the organisation of nurses and shortage of manpower, reducing working hours and the system of rewards and punishments are among the challenges of nursing managers that are consistent with the present study.

Other challenges for nursing managers, especially in times of crisis, are the lack of care equipment and, as a result, inadequate treatment process and poor patient care. As mentioned in the present study, in some cases, the lack of equipment posed a challenge for nursing managers. In this regard, the present study is in line with Morley's study. Morley states that lack of ICU beds, intubation equipment and extracorporeal membrane oxygenation were some of the deficiencies during the COVID-19 epidemic.[27] The challenge of care and the shortcomings faced by the nursing staff in this area can sometimes create many problems for nursing managers. In the present study, there were shortcomings in this area sometimes, which, of course, were gradually eliminated by the efforts of nursing managers.

In general, in the event of a crisis, planning and reacting quickly and in a timely manner is one of the most important issues in dealing with the crisis. In the previous studies, eliminating the shortage of manpower, providing equipment and means of personal protection, encouraging the personnel, maintaining their morale and psychological support, having tactical and appropriate goals with the organisation, and establishing proper communication with the staff and subordinates have been the prominent characteristics of the nursing manager. Therefore, by dealing with these problems, the nursing manager can introduce him/herself as a role model and act logically in the face of crisis.[15 17 24 26 27] In the present study, nursing managers were able to overcome the corona crisis by using the appropriate and maximum manpower and providing the necessary equipment.

CONCLUSION

Nursing management is one of the responsibilities that the manager must be constantly aware of during the activities of his subset. This requires a constant presence in the workplace and communication with nursing staff. Also, in times of crisis, the manager, in addition to having scientific ability, must also have sufficient experience. These two factors will lead to crisis management. As the results of the present study and similar studies have shown, training staff and managers in crisis management is one of the most important issues in nursing management. It is suggested that these issues should be included in the ongoing training of nursing staff. The presence of jihadi staff and nursing staff and managers was a very important and thought-provoking point in the present study. According to the managers, the nursing staff had this spirit that helped a lot in managing human resources and proper work of the staff. Also, training staff and managers in crisis management before a crisis is one of the most important issues in nursing management.

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