J Caring Sci, 2023, 12(3), 174-180
doi: 10.34172/jcs.2023.31909
https://jcs.tbzmed.ac.ir

Original Article

Organizational Climate of the COVID-19 Intensive Care Units: A Qualitative Content Analysis Study

Parvaneh Khorasani[1], Amrollah Ebrahimi[2], Sima Andalib[3], Mahnaz Ahmadi[4], Sayed Mohammad Hosain Mousavi[5*]

[1]Department of Community Health Nursing, School of Nursing and Midwifery, Nursing and Midwifery Care Research Center, Isfahan University of Medical Sciences, Isfahan, Iran
[2]Department of Health Psychology, School of Medicine, Isfahan University of Medical Sciences, Isfahan
[3]Department of Psychology, Islamic Azad University, Tehran Science and Research Unit, Isfahan, Iran
[4]Department of Psychology, School of Counseling and Psychology, University of Isfahan, Isfahan, Iran
[5]Behavioral Sciences Research Center, Vice-Chancellor for Research and Technology, Isfahan University of Medical Sciences, Isfahan, Iran

Article Info
Article History:
Received: January 1, 2023
Accepted: July 16, 2023
e-Published: August 7, 2023

Keywords:
Nurses, Intensive care units, COVID-19, Organizational climate, Qualitative research

***Corresponding Author:**
Sayed Mohammad Hosain Mousavi,
Email: seyedmhm74@gmail.com

Abstract
Introduction: To manage the psychological consequences of providing services in the COVID-19 intensive care units (ICUs), it is necessary to identify the experience of nurses from the organizational climate. The current study was conducted to explain the nurses' experience of the organizational climate of the COVID-19 ICUs.
Methods: This qualitative study was conducted in three teaching hospitals affiliated to Isfahan University of Medical Sciences. 17 individual and semi-structured interviews with 12 nurses working in three selected COVID-19 centers were included in the data analysis. The participants were selected by purposive sampling and interviewed in one or more sessions at a suitable time and place. Interviews lasted for 45 to 90 minutes and continued with conventional content analysis until data saturation. Data analysis was done using conventional content analysis of Graham and Leideman model. Guba and Lincoln criteria (including validity, transferability, consistency, and reliability) were used to ensure reliability and accuracy.
Results: The results of data analysis were classified into 82 primary concept codes and 10 sub-categories in the form of 3 categories: "positive climate of attachment and professional commitment", "emotional resonance in the work environment" and "supportive environment of the organization".
Conclusion: This study led to the identification of nurses' experiences of the organizational climate during the COVID-19 which provides appropriate information to nursing managers to create a favorable organizational climate and increase the quality of work-life of nurses.

Introduction

In December 2019, the COVID-19 virus affected Iran's health system like other countries as a critical situation.[1] According to official statistics, this virus has resulted in the death of 127 551 thousand people and infected more than 6 million Iranians until November 28, 2019.[2]

Nurses in COVID-19 intensive care units (ICUs) experienced a lot of pressure due to direct contact with patients and stressful environmental conditions. High demand in the workplace, high mortality rate, interpersonal conflicts, lack of knowledge, and also high work pressure are mentioned as factors affecting the stress and anxiety of nurses in COVID-19.[3] And due to the high psychological pressure of ICUs, this unfavorable situation is aggravated and can affect the quality of patient care.[4] In COVID-19, about 50% of nurses have experienced depression, 45% anxiety, 34% insomnia, and 71% stress[3] and their quality of life has been significantly affected. Therefore, Nurses in COVID-19 ICUs experience a lot of job stress. Meanwhile, nurses rarely take care of their health while taking care of patients.[5]

One of the organizational factors affecting the organizational performance and behavior of nurses is the organizational climate. Organizational climate is the feeling and understanding of the employees towards the work environment. Also, organizational climate is defined as the working environment created through common perceptions and arising from the behaviors, and attitudes of employees in the organization. Just as every person has a unique personality, every organization has a unique climate. Organizational climate is a set of characteristics perceived by employees.[6] The hospital's organizational climate, directly and indirectly, affects the quality of patient care by changing the behavior of

nurses.[7] A positive and favorable organizational climate has an inverse relationship with the rate of nurses leaving the service.[8]

The impact of the ICU's climate on the quality of services provided by nurses reveals the necessity of identifying the organizational climate and continuously improving it for nursing managers. Considering that nurses encountered new perceptions and experiences of the organizational climate during COVID-19, and the identification of the organizational climate governing ICUs is based on the understanding and lived experience of nurses, the application of the qualitative research method becomes necessary. Therefore, the present study was conducted to identify nurses' experience of the organizational climate of COVID-19 ICUs.

Materials and Methods

The present qualitative research was conducted using the conventional content analysis method after obtaining the code of ethics, through in-depth interviews with 12 nurses. The participants included nurses working in the COVID-19 ICUs (in Seyyed-Alshohada, Alzahra, and Isa bin Maryam hospitals). Data were collected from September 30 to December 30, 2019.

In this research, the researcher tried to examine the living experience of people in real conditions without making any changes in the environment.

Therefore, according to the principles of the qualitative method, in-depth semi-structured interviews were conducted by phone (9 interviews) and face-to-face (10 interviews) in a suitable place by the researcher (master's degree in health psychology) with nurses who met the inclusion criteria (Age 25 to 55 years who work in the COVID-19 ICUs for at least two months). According to purposive sampling, researchers tried to include nurses with diverse characteristics in terms of age, gender, work experience, and marriage to maximize diversity and achieve the richness of information.

The interviews lasted between 45 and 90 minutes. At first, the interviewer carefully transcribed the audio files of the interview after obtaining permission from the participants. Interview with general questions like "What is your perception of the hospital during the COVID-19 pandemic?" "How do you feel about your place of service in this situation?" and "What do you think the climate of your workplace is like and what are its characteristics?" It started, then to clarify the information provided and to clear the ambiguities, the interviewer asked exploratory questions such as "What do you mean by that?" and "Can you explain this more?" or, if necessary, additional interviews were conducted with some participants.

Data analysis is done simultaneously with data collection through conventional content analysis according to the steps proposed by Graham and Laidman.[9] To obtain the primary codes, the implemented interviews were examined sentence by sentence, and then the main and conceptual message was extracted and recorded. In some cases, the transcripts were returned to the participants for comments and/or corrections. The researcher coded quotations. The primary codes that were similar in terms of meaning were organized under one category. The continuation of the interviews would complete the categories or form new categories. In the 18th and 19th interviews, no new code was found, and thus data saturation was created with 12 samples and 17 interviews.

Guba and Lincoln's criteria were used to ensure the accuracy and reliability of the data.[10] In this way, the research group examined the credibility of the data by reviewing the manuscripts by the participants and conducting additional interviews for more depth and clarity of the data. Two faculty members of industrial and organizational psychology and nursing (external check) control confirmability through researchers' impartiality, agreement on codes and themes, and examination of the text of interviews, codes, and categories. The stability of the findings (Dependability) was done by taking notes on time, holding meetings with the research team (Internal check), and studying and matching the codes with the whole data in two stages. In the end, the transferability or fitness through interviews with different participants and providing direct quotations and examples led to a rich explanation of the data.

This study was conducted with the code of ethics (IR.MUI.MED.REC.1399.026) at Isfahan University of Medical Sciences. All participants were included in the study. They also signed the informed consent form to participate in the research.

Results

The participants in this study were nine female nurses and three male nurses, with an age range of 26 to 49 years, an average work experience of 8.5 years, and working in ICUs of three referral centers for COVID-19. Demographic information is shown in Table 1 is provided.

Categories and sub-categories resulting from the qualitative content analysis of the interviews are shown in Table 2. 82 primary concept codes classified into 10 sub-categories and 3 main categories: "positive climate of attachment and professional commitment", "emotional resonance in the work environment" and "supportive climate of the organization".

Positive Climate of Attachment and Professional Commitment

The first main category was called "positive climate of attachment and professional commitment", which includes three subcategories: "occupational commitment", "occupational interest and motivation" and "occupational self-efficacy". According to the participants, a bilateral emotional and cognitive connection between the nurse and the nursing profession due to the climate prevailing in the organization was visible in the behavior of

Table 1. Demographic characteristics of nurses participating in the study

Code	Gender	Age	Education	Marital status	Work history	Code	Gender	Age	Education	Marital status	Work history
1	Woman	35	BSc	Married	10	7	Woman	35	BSc	Married	5
2	Woman	33	BSc	Married	8	8	Woman	26	BSc	Married	8
3	Woman	36	BSc	Married	11	9	Woman	47	BSc	Married	28
4	Woman	29	BSc	Single	3	10	Man	49	BSc	Married	16
5	Woman	30	BSc	Married	4	11	Man	29	BSc	Single	2
6	Woman	28	BSc	Single	2	12	Man	34	BSc	Married	6

Table 2. Identified categories and sub-categories resulting from the qualitative content analysis of the interviews

Sub-categories	Categories
Positive climate of attachment and professional commitment	Job commitment
	Occupational interest and motivation
	Occupational self-efficacy
Emotional resonance in the work environment	Helplessness and burnout
	Inducing fear of getting sick
	Anxiety
	Moral challenges
Supportive environment of the co-workers	Easy and quick access to information and training
	A shared sense of understanding and empathy
	Support from colleagues

most nurses.

A. Job commitment: Some nurses talked about the feeling of commitment to work in the hospital environment and declared that they had a committed approach to facing the situation. That is, while accepting hardships and adversities, they were committed and committed to providing services to patients. For example, a nurse stated:

"This is my job and it is a commitment that I have given to myself and my people, and we must stand by our promise in these crises" (M 7).

B. Occupational interest and motivation: Nurses believed that their work environment is not very attractive and passionate, but besides the negative feelings and experiences, they felt good that they could serve their fellows. Therefore, to serve as a nurse, they reported good work motivation from a psychological point of view. For example, a nurse said:

"I feel very good to be able to serve my people in this situation. I am proud to be a nurse and I will do my best" (M3).

"We are very eager for the guards and we are all very active and we will defeat Corona with the help of God" (M 1).

C. Occupational self-efficacy: The favorable care performance of the nursing group during COVID-19 made them believe in their efficiency in facing the new care challenges of the COVID-19 pandemic. This feeling of self-efficacy could strengthen the attachment to the nursing profession in nurses. For example, a nurse stated:

"Although I was scared in the face of the pandemic, I did not move. I don't have big ideas, but I think I will handle this responsibility…I never thought I could be this strong" (M12).

"It seems there is nothing I can't overcome" (M9).

According to the above statements, a part of the organizational climate perceived by nurses in the conditions of the COVID-19 pandemic was related to attachment, commitment, and strengthening the self-efficacy of the profession and the positive career and professional aspects of nursing.

Emotional Resonance in the Work Environment

The second main category was called "emotional resonance in the work environment", which includes four subcategories: "Helplessness and burnout", "inducing fear of getting sick", "anxiety", and "moral challenges" which mentioned in the following explanations along with examples of relevant narrations.

A. Helplessness and burnout (caused by too much work, insufficient rest, and individual and group protection requirements): The increase in the organization's expectations regarding the quantity and quality of nursing care in the climate prevailing in the COVID-19 ICUs was causing helplessness and inducing a feeling of excessive mental and physical fatigue. Nurses stated that they feel helpless when they work beyond their capacity and are unable to meet the constant needs of their profession.

"After working 12 to 16 hours a day, I feel very tired and can even sleep standing up with pain all over my body" (M3).

"...there are many patients. Our job is not only to take care of them but also to participate in training, reporting information, disinfecting, and isolating. I feel like I do not know where to start and I am so overwhelmed. But I don't have time to go to psychological counseling; I don't even have time to sleep..." (M10).

B. Inducing fear of getting sick (caused by the uncertainty of prevention methods and the lack of definitive treatment when contracting viral infections in the workplace): According to the participants, considering that in the conditions of the study, there was no complete prevention to ensure that the nurses did not get infected and there was no definitive treatment for the patients, which caused fear in the organizational climate of the ICU.

"Although I volunteered in the infectious disease units, I am still very scared; After all, this is a new infectious disease and there is currently no specific medicine. I was

afraid to see reports about the sacrifice of medical staff in other cities" (M9).

In addition, according to the prediction of some epidemiologists regarding the infection of a large percentage of people, nurses have experienced a lot of fear.

"I am very afraid that this viral infection will become so widespread that my medical staff will not have the necessary ability to care" (M10).

In addition, due to the possibility of transmitting this virus to family members, nurses were worried about their families during working hours and providing service. For example:

"I'm worried about infecting my children…I am the only child and my mother cries every day and is afraid that I will be infected and I am more worried about them" (M4).

These concerns were one of the components of the prevailing emotional climate in the nursing units.

C. Anxiety (caused by lack of knowledge and changing instructions and working in a new work environment): The nurses stated due to the unknown nature of this virus, they do not have the necessary knowledge of the principles of care, and this has caused the nurses to worry.

"Although I have worked in infectious diseases, there is still a lot of knowledge to be learned because this is a new infectious disease. We also need to train new colleagues. I feel anxious" (M3).

"When I first came here, I felt that there were many corridors in the infectious diseases units. The environment was unfamiliar and my colleagues were unfamiliar. The methods of operation and routine care of the disease were different from the previous works. I was very anxious" (M2).

D. Moral Challenges (caused by the lack of medical resources and facilities and the lack of fixed care guidelines): The nurses stated that their care services were affected by the lack of sufficient resources to meet the needs of the patients. In such a way that their work environment had severe ethical conflicts to prioritize available resources between colleagues and patients as well as between different patients. For example, one nurse described the lack of beds in the ICU:

"We needed more ICU beds... so we had to decide who went to the ICU and who didn't, it was hard to understand. ... You know this ... but you have to accept it ... (silence)" (M3).

On the other hand, due to the lack of fixed care instructions in many cases, they used care instructions in a state of ambiguity and uncertainty, and this put them in severe moral conflicts; In this regard, a nurse said:

"The instructions for using drugs were mentioned in different sources in different ways that we were not sure about using them and we had to do trial and error. We didn't have..." (M12).

Supportive Environment of the Co-workers

The third category of the results of the present study is entitled "supportive environment of the organization" which has sub-categories including: "*Easy and quick access to information and training*", "*A shared sense of understanding and empathy*" and "*Support from colleagues*".

A. Easy and quick access to information and training: The nurses stated that the lack of knowledge and experience in facing such unexpected situations has been a source of stress for them, that the nursing education provided them with this new knowledge and information by holding face-to-face and online classes during the pandemic. For example, a nurse stated:

"We had special training courses to deal with the COVID-19 epidemic. The activities included hand hygiene and the correct use of masks and protective clothing. Mastering these things can at least provide effective self-protection" (M6).

In addition, some nurses reported sharing efforts and transferring the knowledge and skill experience of patient care by more experienced nurses, which according to the participants, easy and quick access to information and training has been established in the relevant units. For example, one of the nurses stated:

"I was transferred from the laboratory to the intensive care unit, and at first because I had no work experience in this unit, I did not have the confidence and efficiency at the beginning; But since all my colleagues gave me the necessary training and even answered my questions over the phone, I was able to deal with this issue better" (M6).

B. A shared sense of understanding and empathy: While experiencing unpleasant situations in interactions with patients, colleagues, and nursing managers, nurses stated that there was generally a climate of empathy in the organization. For example, one of the nurses said in an interaction with colleagues:

"Many colleagues called me to encourage me and I felt that there are many people who care about me" (M5).

Alternatively, regarding the performance of the managers and the organization, another nurse said:

"The University of Medical Sciences and the government did not prepare our protection conditions well to support our fight against this epidemic, But the efforts of the nursing managers of the hospital and their emotional support and linguistic appreciation were effective for me" (M2).

In addition, nurses experienced emotional empathy in interacting with patients.

"After every time I go to the patient's bedside, the patient himself and his family thank me and pray for us; Despite all the difficulties, this gives me a very good feeling" (M7).

C. Support from colleagues: Many nurses stated that with the emergence of the epidemic situation, they did not understand enough behavioral support from the managers of the organization. For this reason, colleagues and nurses working in the units interacted with each other by performing behaviors based on mutual understanding and

empathy, and this climate has created behavioral support from colleagues for them. For example, a nurse said:

"The policies of the organization did not change at all, and the heavy workload brought a lot of stress for us, but my colleagues have changed shifts many times so that we can reach our families and personal plans" (M1).

Another nurse said:

"Besides all the busy work, we try to create a happy climate for ourselves; Even if it happens, we hold a simple birthday party and send congratulatory messages to each other" (M5).

Discussion

The current study was conducted to explain the nurses' experience of the organizational climate of the COVID-19 ICUs.

One of the main categories identified in this study was named "positive climate of attachment and professional commitment". Attachment to the nursing profession and job commitment referred to here is not a legal requirement that is included in nurses' codes of practice, but rather a deep feeling of desire to provide quality care[11]; which has prevailed in the climate of the organization and the nurses' care units in the present study. In this regard, in the country and abroad, the feeling of occupational commitment to the nursing profession has been one of the experiences of nurses in the organizational environment of the hospital.[12-15] In this study, the sense of job commitment in the organization environment encouraged nurses to actively participate in anti-epidemic work, which has strengthened their professional attachment according to previous studies.[16] Also, in a study conducted at the beginning of the epidemic in the United States, nurses pointed to the importance of knowing their needs and considering their expertise as an important part of organizational and systemic preparation strategies to deal with the crisis and expressed their sense of self-efficacy.[17,18]

The supportive climate of the organization was another experience of the nurses from the organizational climate in the ICUs. Participants generally believed that their work environment was accompanied by multidimensional support from patients, family members, team members, and community groups. In another study, it has been concluded that the support of colleagues is one of the important aspects of the organizational climate from the nurses' point of view.[19] In line with this finding of the present research, in Italy, lack of support and appreciation from managers and supervisors has been reported as the most important factor driving stress at the organizational level.[20] Study conducted in the Egypt showed that recognition, encouragement, and appreciation among nurses have satisfactory effects on improving the organizational climate.[21] Also, in England, initiatives such as public encouragement of frontline staff helped to strengthen their motivation, and some nurses were influenced by collective gratitude in the organizational climate.[22] Lwin et al also showed that the recognition of the nurse's role and her services in an organizational climate strengthens the nurses' motivation to stay at work.[23] These findings indicate that the organizational climate in different healthcare service organizations is different in the field of organizational support and has formed a different organizational climate in terms of professional interactions. Therefore, a supportive work environment is one of the features of the organizational climate that moderates emotional stress in the organization and the COVID-19 ICUs and is necessary for nurses to fight against the pandemic.[24] Managers help healthcare workers face the unique challenges imposed by the COVID-19 pandemic by creating an organizational climate by providing supportive organizational programs and maintaining a safe work environment.[25]

In interactions with various stimuli in the organization, nurses experienced different feelings and emotions during the performance of their duties, which indicated the existence of the phenomenon of "emotional resonance in the work environment" in the organizational climate of COVID-19 nursing centers. For example, the increase in workload and the need to adapt to new care and nursing protocols, along with the need to acquire new knowledge to deal with the pandemic, has created a stressful work environment for nurses,[22] which initially caused the formation of stigma. Anger, stress, fear, guilt, helplessness, loneliness, tension, sadness, and anxiety have become in them, and this indicates the existence of an emotional climate that governs the COVID-19 care units.[26] Also, based on the research conducted on the organizational climate of Houston Methodist Hospital during the COVID-19 epidemic, it was found that nurses had important concerns for the health of their families, they hesitated to return home for fear of infecting family members and they experienced emotional exhaustion during the task. This was especially evident among intensive care workers.[27] In addition, nurses faced moral conflicts caused by the epidemic in their work environment, which made their decisions conditional[28] and strengthened the emotional climate of the organization. Participants felt an uncomfortable disconnect between their values (help people and don't make mistakes) and the reality of the pandemic. Thus, the COVID-19 pandemic has caused potentially harmful events of moral conflict that can lead to negative thoughts about oneself or others, as well as deep feelings of shame, guilt, or disgust. These moral conflicts, in turn, can help to create mental health problems such as depression, anxiety, or substance use disorders and strengthen the emotional climate governing the COVID-19 care units.[29]

The specific organizational study of the COVID-19 ICUs has been one of the points of this study, but due to the characteristics of qualitative research, the sample size of this study was limited. In addition, we were not able to comply with the protocols related to conducting health

group interviews. In addition, this study was a short-term study. Long-term experience in people research can be for future discovery. Finally, only three of the 12 participants were male. However, this does not indicate a gender bias, as the majority of nurses are female.

Conclusion

Iranian nurses' understanding of the organizational climate in the hospital is influenced by their political, social, economic, and cultural backgrounds. Our findings show that nursing managers can improve the performance and improve quality of the work life of nurses by increasing the scientific and skill capabilities of nurses through peer-oriented training during the pandemic and adopting special support policies for nurses. This can help increase the durability and organizational effectiveness of medical centers.

Acknowledgments

The authors thank the Vice Chancellor for Research and Technology of Isfahan University of Medical Sciences and nurses working in the care of COVID-19.

Authors' Contribution

Conceptualization: Parvaneh Khorasani, Amrollah Ebrahimi, Sima Andalib, Mahnaz Ahmadi, Sayed Mohammad Hosain Mousavi.
Data collection: Sayed Mohammad Hosain Mousavi, Sima Andalib, Mahnaz Ahmadi.
Formal analysis: Parvaneh Khorasani, Amrollah Ebrahimi, Sima Andalib, Mahnaz Ahmadi, Sayed Mohammad Hosain Mousavi.
Funding acquisition: Amrollah Ebrahimi.
Investigation: Sayed Mohammad Hosain Mousavi, Sima Andalib.
Methodology: Sayed Mohammad Hosain Mousavi, Sima Andalib.
Project administration: Parvaneh Khorasani.
Resources: Sayed Mohammad Hosain Mousavi.
Software: Sayed Mohammad Hosain Mousavi, Mahnaz Ahmadi.
Supervision: Parvaneh Khorasani, Amrollah Ebrahimi.
Validation: Parvaneh Khorasani, Amrollah Ebrahimi.
Visualization: Sayed Mohammad Hosain Mousavi, Mahnaz Ahmadi.
Writing–original draft: Sayed Mohammad Hosain Mousavi, Sima Andalib, Mahnaz Ahmadi.
Writing–review & editing: Parvaneh Khorasani, Amrollah Ebrahimi.

Research Highlights

What is the current knowledge?

Nurses in COVID-19 ICUs and their families experienced a lot of pressure due to direct contact with patients and stressful environmental conditions

What is new here?

The basic elements of organizational climate that nurses perceived about their organization were investigated in the fields of health care in Isfahan City.

- A part of the organizational climate perceived by nurses during the COVID-19 pandemic related to attachment, commitment, and strengthening the professional self-efficacy.
- Nurses generally believed that their organizational climate is accompanied by multidimensional support from patients, family members, team members, and community groups.
- In interactions with various stimuli in the organization, nurses experienced different feelings and emotions, which indicated the existence of the phenomenon of "emotional resonance in the work environment" in the organizational climate of COVID-19 nursing centers.

Competing Interests

Nothing to declare.

Data Availability Statement

All data generated or analyzed during this study are included in this published article (and its supplementary information files).

Ethical Approval

The Research Ethics Committee of Isfahan University of Medical Sciences approved this study on April 8, 2020 (ID: rec.med.mui.ir1399.026). Participants were informed about the aims and method of the study and ensured that their identities would be kept confidential. Their participation was voluntary, and they signed a written consent and had the right to withdraw from the study at any stage. The researcher also had no therapeutic or caring relationship with the participants.

Funding

The Vice Chancellor for Research and Technology, Isfahan University of Medical Sciences.

References

1. Zangrillo A, Beretta L, Silvani P, Colombo S, Scandroglio AM, Dell'Acqua A, et al. Fast reshaping of intensive care unit facilities in a large metropolitan hospital in Milan, Italy: facing the COVID-19 pandemic emergency. Crit Care Resusc. 2020; 22(2): 91-4.
2. Rosenvald N. Coronavirus cases. Ius et Praxis. 2020; 50(50-51): 109-12. doi: 10.26439/iusetpraxis2020.n50-51.5049
3. Ifdil I, Fadli RP, Suranata K, Zola N, Ardi Z. Online mental health services in Indonesia during the COVID-19 outbreak. Asian J Psychiatr. 2020; 51: 102153. doi: 10.1016/j.ajp.2020.102153
4. Najafi F, Kermansaravi F, Gangoozehi E. The relationship between general health and quality of work life of nurses working in Zahedan teaching hospitals. Iran J Rehabil Res Nurs. 2018; 4(2): 53-9. doi: 10.21859/ijrn-04028
5. Kang L, Li Y, Hu S, Chen M, Yang C, Yang BX, et al. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. Lancet Psychiatry. 2020; 7(3): e14. doi: 10.1016/s2215-0366(20)30047-x
6. Liu CY, Yang YZ, Zhang XM, Xu X, Dou QL, Zhang WW, et al. The prevalence and influencing factors in anxiety in medical workers fighting COVID-19 in China: a cross-sectional survey. Epidemiol Infect. 2020; 148: e98. doi: 10.1017/s0950268820001107
7. Sodeify R, Habibpour Z. Determining nurses understanding of psychological factors at workplace: a qualitative study. Sci J Nurs Midwifery Paramed Fac. 2020; 5(4): 49-61. [Persian].
8. Elewa AH, El Banan SH. Organizational culture, organizational trust and workplace bullying among staff nurses at public and private hospitals. Int J Nurs Didact. 2019; 9(4): 10-20. doi: 10.15520/ijnd.v9i04.2512
9. 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
10. Guba EG, Lincoln YS. Fourth Generation Evaluation. 1st ed. USA: SAGE Publications; 1989.
11. Water T, Rasmussen S, Gerrard D, Neufeld M, Ford K. Nursing's duty of care: from legal obligation to moral commitment. J Prof Nurs. 2017; 33(3): 7-20. doi: 10.36951/NgPxNZ.2017.010
12. Jones S, Sam B, Bull F, Pieh SB, Lambert J, Mgawadere F, et al. 'Even when you are afraid, you stay': provision of maternity care during the Ebola virus epidemic: a qualitative study. Midwifery. 2017; 52: 19-26. doi: 10.1016/j.midw.2017.05.009
13. Liu Q, Luo D, Haase JE, Guo Q, Wang XQ, Liu S, et al. The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. Lancet Glob Health. 2020; 8(6): e790-e8. doi: 10.1016/s2214-109x(20)30204-7
14. Varasteh S, Esmaeili M, Mazaheri M. Factors affecting Iranian nurses' intention to leave or stay in the profession during the COVID-19 pandemic. Int Nurs Rev. 2022; 69(2): 139-49. doi: 10.1111/inr.12718
15. Kalateh Sadati A, Zarei L, Shahabi S, Heydari ST, Taheri V, Jiriaei R, et al. Nursing experiences of COVID-19 outbreak in Iran: a qualitative study. Nurs Open. 2021; 8(1): 72-9. doi: 10.1002/nop2.604
16. Khalid I, Khalid TJ, Qabajah MR, Barnard AG, Qushmaq IA. Healthcare workers emotions, perceived stressors and coping strategies during a MERS-CoV outbreak. Clin Med Res. 2016; 14(1): 7-14. doi: 10.3121/cmr.2016.1303
17. Liu Q, Luo D, Haase JE, Guo Q, Wang XQ, Liu S, et al. The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. Lancet Glob Health. 2020; 8(6): e790-e8. doi: 10.1016/s2214-109x(20)30204-7
18. Shanafelt T, Ripp J, Trockel M. Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. JAMA. 2020; 323(21): 2133-4. doi: 10.1001/jama.2020.5893
19. Shahnavazi A, Fadaei Eshkiki M, Shahnavazi H, Bouraghi H. The effect of perceived organizational climate on the performance of nurses in private hospitals. J Clin Res Paramed Sci. 2021; 10(2): e108532. doi: 10.5812/jcrps.108532
20. Sriharan A, Ratnapalan S, Tricco AC, Lupea D, Ayala AP, Pang H, et al. Occupational stress, burnout, and depression in women in healthcare during COVID-19 pandemic: rapid scoping review. Front Glob Womens Health. 2020; 1: 596690. doi: 10.3389/fgwh.2020.596690
21. Mohamed HA, Gaballah S. Study of the relationship between organizational climate and nurses' performance: a university hospital case. Am J Nurs Res. 2018; 6(4): 191-7. doi: 10.12691/ajnr-6-4-7
22. Maben J, Bridges J. COVID-19: supporting nurses' psychological and mental health. J Clin Nurs. 2020; 29(15-16): 2742-50. doi: 10.1111/jocn.15307
23. Lwin PM, Rattanapan C, Laosee O. Nurses' intention to remain employed in hospitals: understanding the shortage in the context of Myanmar. Int J Nurs Pract. 2017; 23(4): e12536. doi: 10.1111/ijn.12536
24. Kang HS, Son YD, Chae SM, Corte C. Working experiences of nurses during the Middle East respiratory syndrome outbreak. Int J Nurs Pract. 2018; 24(5): e12664. doi: 10.1111/ijn.12664
25. Labrague LJ, De Los Santos JAA. COVID-19 anxiety among front-line nurses: predictive role of organisational support, personal resilience and social support. J Nurs Manag. 2020; 28(7): 1653-61. doi: 10.1111/jonm.13121
26. Huang L, Lei W, Xu F, Liu H, Yu L. Emotional responses and coping strategies in nurses and nursing students during COVID-19 outbreak: a comparative study. PLoS One. 2020; 15(8): e0237303. doi: 10.1371/journal.pone.0237303
27. Sasangohar F, Jones SL, Masud FN, Vahidy FS, Kash BA. Provider burnout and fatigue during the COVID-19 pandemic: lessons learned from a high-volume intensive care unit. Anesth Analg. 2020; 131(1): 106-11. doi: 10.1213/ane.0000000000004866
28. Bellver Capella V. [Bioethical problems in the provision of nursing care during the COVID-19 pandemic]. Index de Enfermeria. 2020; 29(1-2): 46-50. doi: 10.4321/S1132-12962020000100011
29. Williamson V, Murphy D, Greenberg N. COVID-19 and experiences of moral injury in front-line key workers. Occup Med (Lond). 2020; 70(5): 317-9. doi: 10.1093/occmed/kqaa052