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COVID-19 as a Humanistic Care Facilitator in Intensive Care Unit: A Technical Action Study

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ABSTRACT

Aims The qualities of nursing care and factors affecting it have always been a challenge in health care systems. Humanistic care is an approach in care delivery in the nursing profession. Participation of different parts, including patients, their families, and nurses, improves care satisfaction. This study aimed to promote humanistic care in an intensive care setting using technical action research.

Methods This study was conducted as Technical Action Research based on the "unsparing response to situation" Model. Data was collected using semi-structured interviews, and field notes through purposive sampling were performed with quantitative and qualitative methods during four steps in the intensive care unit of Booali Sina Hospital from 2018 to 2020.

Findings After four months of program implementation and changes due to the COVID-19 crisis in the final evaluation phase, data collection reflected "understanding of patient and family needs and concerns, empathy by nurses, mutual satisfaction, "non-discrimination and replacement of ethical reasoning on the personal judgment", "birth and germination of humanistic care and "growing satisfaction from humanistic care. Also, increasing the score of quality of nursing care, quality of work-life and Caring Nurse-Patient/Family Interactions after interventions indicated the promotion of humanistic care in the intensive care unit.

Conclusion Humanistic values are intrinsic; they can be exteriorized in special sensitive circumstances and "education and learning professional values" and are not necessarily acquired. Covid-19 has acted as a facilitator, accelerating the conversion of non-humanistic to humanistic care. Knowing this, managers should properly understand and analyze the intervening variables based on the proposed care model, i.e., the "existence of care promotion elements" and "sensitivity of situations".

Keywords COVID-19; Intensive Care Unit; Nursing; Qualitative Research

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Introduction

On the other hand, natural disasters challenge the ability of health care systems to meet the needs of the communities. Damage to infrastructures, staff shortages, and increased demand for health care resulting may reduce the performance of health care systems. Disasters can raise concerns for professional staff regarding safety, family relationships, and professional duties [1]. These issues were raised due to the COVID-19 outbreak in December 2019 rising with many unknown pneumonia cases in Wuhan, China. On January 30, 2020, the World Health Organization declared the new coronavirus epidemic a public health emergency and a major international concern [2]. On February 21, 2020, Iran was recognized as the 31st country to be infected with the virus officially. On March 11, 2020, the World Health Organization declared a pandemic of the COVID-19 virus.

Despite the violent nature of crises caused by infectious diseases and their global epidemic, they might be helpful in some aspects to trigger positive actions. One study [3] demonstrated nurses' perceptions of the flu crisis by a professional commitment and spirit and striving to improve the quality of care in emergency ward nurses. Moreover, one study introduced some new concepts in nurses such as "A myriad of emotions in caring for SARS patients", "family care," and "commitment to the nursing" in their phenomenological study in caring for SARS patients in Hong Kong [4]. The presence and function of nurses in pandemic crises have not ever been passive. Many nurses from Florence Nightingale in the Crimean War in 1856 to Fatou Kokola, a nursing student in the Ebola Epidemic in 2014, played an important and active role by much self-sacrifice. According to the theory-unsparing response to a situation- Nurses' attention and moral and human values are aroused in critical situations [5]. Valuing human beings is the foundation of the nursing profession and the essence of care. Lack of appropriate coordination between some aspects of modern health care and humanity guidelines has made the promotion of humanism in nursing a major challenge. Nursing experts have tried to solve this challenge by presenting human-centered theories [6]. Humanitarian health care practices highlight the importance of quality care provided to users of the health care system, including patients and their families [7]. In a crisis-free situation, the issue of humanism and humanistic care has many challenges in intensive care units [8]. In the Crimean crisis, Ebola, SARS, and Mercer…, nurses gave an unsparing and humane response to human needs based on human values and profession.

Therefore, the present study was performed based on the theory of "unsparing response to the situation" [9], extracted based on a grounded theory in critical wards and situations. Following demand and self-compensation of failed rights, the theory of "unsparing response to the situation" is formed, as it would be activated by "synergy of education/learning and situation". The synergy of education/learning and situation is formed by a positive interaction between "the existence of care promotion elements" and ''sensitivity of situations" with "education and learning professional values". The situation refers to the working conditions of nurses. Due to patients' vulnerable situation and sensitivity, the nurse ignores their demands and rights and thinks of responding without expectation to the needs and rescue of clients. This is a facilitating variable in promoting care in intensive care units and educating nurses by experience and learning. The "synergy of education/learning and situation" is a conditional variable that changes how to deal with rights violations [9]. This reflects the excellent and valuable characteristics of humanistic care or nursing. Therefore, the researchers tried to expand this theory and this kind of humanistic nursing by the participation of nurses.

As this theory has been formed in the context of intensive care units and nurses' perspectives, a technical action study was performed to help to make the theory more operational.

Participants and Methods

The present study was performed according to the "unsparing response to situation" theory and initiated in December 2018 and was completed in June 2020 due to the COVID-19 outbreak. This research is a type of Technical Action Research (TAR) because a model has been used to implement the steps [10]. This theory became prominent in clinical care during the COVID-19 outbreak with an unintended and unforeseen impact of the crisis as a facilitator of humanistic care in the intensive care unit. Booali Sina Educational and Medical Center is affiliated with Qazvin University of Medical Sciences and provides specialized and services to the community. The present study was performed in the intensive care unit with 11 active beds.

The ward has 30 nursing staff trained in intensive care skills and an anesthesiologist. Patients with internal medicine diseases, neurologic and toxicology disorders are admitted. Mean hospitalization stay was 11.02±12.46 days. Daily visits by internal medicine, cardiology, and neurology specialists are also performed. Family visits of patients were prohibited after the outbreak. But, they could visit their patients from behind the closed window. This ward does not have a waiting room for patients' families or a glass room for visiting patients. With the COVID-19 epidemic, visits were not allowed. Describing the stages of action research [11] resembled a spiral that professional or personal progression develops through its stages. The research process continues with planning for

change, review and observation, the reflection of results, and modifications on steps [10].

First step

Explaining and confirming the problem by collecting basic information and analyzing the situation: A qualitative content analysis was performed using individual interviews and group discussions to explain the problem and a common understanding of the team active in human care problems among nurses. In different shifts, the researcher spent three days a week for two hours and six months observing the interaction of nurses and patients in the ward and recording the interaction. If necessary, the researcher conducted 22 interviews with 14 nurses (1 head nurse and 13 staff; 12 bachelor degrees & 2 masters), four managers, four patients, and companions to fully understand the current circumstances. Questions such as "What is your experience of humanistic care of patients?", "What do you do to provide humanistic care?", "When might pay more attention to the humanistic dimensions of care?" Also, semi-structured individual interviews were conducted with patients or their families, and their understanding and feeling of humanistic care in the ward were asked. The interview duration was 25-120 minutes. The questions of the interview guide were general. Questions such as "Explain the behavior of ward nurses in caring for you/your patient?", "In what circumstances have this humanistic behavior improved?" and "In what circumstances did you feel these human behavior are decreased?" etc. More probing questions were asked as well.

Interviews continued until data saturation was reached and no new theme could be identified. Field note observations were also recorded in the intensive care unit to complete and deepen the interview data. They are intended as objective evidence that gives meaning to the understanding of the humanistic care phenomenon. Field notes allowed us to access the perceptions of the subjects and record what they observed unobtrusively. Data was collected quantitatively using standardized questionnaires to determine the quality of nursing care, quality of work-life of nurses, and nurse-patient/family interactions in the intensive care unit. These questionnaires were completed in person by nurses, patients, and families. Each questionnaire took less than 10 minutes to complete The questionnaire of nurses' quality of working life consists of 67 questions and has been designed and standardized. It has nine dimensions: management performance, professional dignity, adaptability, communication, professional competency, job interaction factors, external motivation, workload, and working shifts [12].

Moreover, the Quality of Patient Care Scale (QUALPAC) consisted of 65 questions that evaluated three psychosocial, physical, and communicational aspects [13]. For assessing patient satisfaction with humanistic care, which includes 23 questions regarding clinical care aspects, communication care, humanistic care, and relieving care. For quantitative data, there was considerable evidence for its reliability and validity for the questionnaire [12-14]. The interviews were all recorded and transcribed verbatim. Field note observations were also recorded in the intensive care unit to complete and deepen the interview data. Each interview was repeated several times so that the researcher could go deeply into the participants' opinions. At the organization stage, open coding was performed by re-reading the interviews, taking notes, and writing titles on the margins. The titles were then recorded on coded papers. Grouping began after several interviews were read. Additional titles and categories evolved by repeating the abovementioned stages for each new interview. After comparing and merging categories belonging to a group, the number of initial categories was reduced. The subcategories with similar themes were grouped as one category. Each category was then named by words representing its content characteristics. The abstraction process continued until four main themes were extracted (Table 1). Qualitative data was analyzed by the process of content analysis [15].

Table 1) Formation of main steps in the problem explanation stage

Subcategory	Examples of quotes
Insufficient understanding of nurses and attendants of each other's roles, needs, and expectations	
-Families' insistence on follow-up of situation and treatment -Ignoring families -Unnecessary and disturbing presence of families -Lack of skills and willingness to interact and guide -Voluntary participation in care	"Watching my patient from the window is difficult, but because he is my brother and he is young, I do not care about the difficulties (to care for him). (Participant 1)" "But they often ask us from the ward window or by telephones, and because they do not see their patients and hear gossips, they somehow always complain about us; they might have some rights." "At the time of visit by companions, I have to get consent, give patients a packed cell and their medicines and check vital signs. Then, with all these conditions, I should take half an hour to inform companions, maybe even more... (Participant 7)." "A young girl was suffering from hypoxia and was hospitalized following a cardiac arrest. The patient's husband, also very young, tried to lubricate the patient's skin with olive oil to prevent sores. He frequently asked nurses what I needed to provide for the patient and was in the hospital most of the time (Note in Area 6)."

The validity of the research in the qualitative data was evaluated by Lincoln & Guba criteria, which include credibility, dependability, transformability and conformability, long-term engagement of the researchers for a year in the field, and spending enough time communicating with participants during data collection helped the researchers to build trust and understanding in participants and

enabled deep data collection. According to criteria [16], maximum variance sampling is based on features such as age, work experience, and the position was used to confirm the transferability of the findings. To ensure that the analysis accurately reflected the participants' experiences, the codes extracted from each interview were controlled and reviewed by the participants, and necessary changes were made in coding based on participants' suggestions. To provide dependability and conformability of data, two nurses who were experts in conducting research and had working experience in the intensive care unit reviewed parts of the raw data, including interviews and analytical products, namely initial codes and categories [17]. These issues were discussed in several group sessions with participatory nurses, the head nurse, and staff, the head of the ward, and hospital nursing managers, including the head of hospital nursing, supervisor, to reach a common understanding and determine the most important issues and obstacles to humanize provided care.

Quantitative data were analyzed using SPSS 17 software. Due to the small size of samples and abnormal distribution, a non-parametric test (Wilcoxon signed-rank test) was used to analyze the data.

Second step

Development of the changing plans (Action Planning): After the first step to clarify the obstacles, some group discussion sessions were held to find the reasons for these problems and their solutions. Interview questions from involved nurses in changing plans included "what are the underlying reasons for these problems in this ward?", "What do you think about the best solution?" etc. After discussing the solutions, the researcher shared the model of unsparing response to the situation [5, 9] with participating nurses to improve care. A consensus was reached regarding the model strategies by the participating nurses who were based on a synergy of education/learning and situation and positive interaction between "the existence of care promotion elements" and ''sensitivity of situations'' with "education and learning professional values" to reach satisfaction with care finally. The details of the change action plans were determined based on the identified obstacles, proposed solutions, and available facilities. At this stage, group meetings with managers were held to determine the necessary instructions and provide financial support to decide on the required changes and implement them.

Despite the fact, after discussing in the group, it was found that "satisfaction with care" nurses could not be modified, and its promotion is subject to correction of other issues; therefore, it was not included in the study. Besides, "Care stagnation" was not included because it was out of the researchers' ability (lack of authority and facilities within the ward and even the hospital). On the other hand, two subjects of "insufficient understanding of nurses and attendants of each other's roles, needs, and expectations" and "the use of personal and situational reasoning rather than ethical principles" were included in the interventions to be modified. The designed plan for changing "insufficient understanding of nurses and attendants of each other's roles, needs and expectations" included; preparing booklets for patients' companions, 2) establishing regular training sessions for companions and answering their questions about their patient, needs, and the current status in the presence of the patient-physician and nurse, 3) the presence of companions in the ward for 10 minutes daily according to regulations, 4) creating a social media group to answer companions' questions by the patient-nurse. These programs were designed based on group discussions and strategies to promote "the existence of care promotion elements" and Healing and relaxing according to the "unsparing response to the situation". However, designed plan for changing "the use of personal and situational reasoning rather than ethical principles" included; 1) seeking help from the Ethics department of the university, 2) Preparation of educational posters in the field of professional ethics and installation in the ward, 3) Supervision by the head nurse and patients' physician as committed role models for ward nurses, 4) Selecting a nurse monthly as an ethics-oriented nurse after evaluation by the head nurse and the head of the ward and appreciating him or her, 5) providing a social media group for humanistic care. These programs were designed based on group discussions and strategies by following a committed model and learning during care and work based on the unsparing response to the situation.

Third step

Implementation of changing plans (Action Taking): After designing the changing plan, duties of the researchers, nurses, head nurse, and educational supervisor, and the head of the ward (physician) were determined according to their job position and their abilities and free times, and an educational booklet was prepared (10 copies) for patients' families and given to the ward. Moreover, the researcher and the ward's head nurse created a social media group to reduce companions' worries and answer their questions. In continuous evaluation sessions in this cycle, the weak points in the booklet were modified dynamically. However, companions' satisfaction from the social media channel was evaluated, and corrections were made if necessary. Besides, educational posters in professional ethics were prepared by the researcher, the head nurse, and the ward staff.

Moreover, a plan for educating humanistic care was prepared, and a social media channel was launched. At this point, the COVID-19 outbreak evolved. The

crisis completely changed the conditions of the ward, and all patients with COVID-19 were admitted to this ward. Permission for families to attend the hospital was revoked. All pre-operation operational plans were stopped, and the researcher was not able to attend the ward anymore. Booali Sina Educational and Medical Center was designated as the COVID-19 center, and the ICU ward was allocated for patients with COVID-19. The action group, except for the researcher, practically became involved in the care of patients. Following this crisis, some voluntarily actions were taken in the hospital at the university and community levels for patients, companions and nurses which included; 1) Implementation of educational processes spontaneously by creating educational channels and updating nurses' information, 2) Implementing motivational programs (financial supports to nurses, distribution of snacks for nurses, presentation of flowers and the flag of Imam Reza (AS) and distribution of blessed foods, reducing working hours by 20 shifts per month in those working in COVID-19 wards, providing a suitable place to quarantine infected medical staff, appreciation of nurses by the president of the university and the hospital, changing the status of contractual employment to permanent occupation, and extending recruitment licenses or re-extension of nursing working contracts), 3) empathy and cooperation of hospital staff in dividing work shifts, 4) Providing a place for patients who are unaccompanied or have a disabled companion, 5) absorbing charity for providing personal protective equipment, 6) considering an appropriate storage for personal protective equipment for a proper saving and distribution, 7) Forming a committee for psychological support of nurses with the help of some psychologists, psychiatrists and faculty members, 8) use of closed wards as a quarantine place for infected medical staff, 9) daily follow-up of the disease status and treatment of infected medical staff, 9) Establishment of a service desk to inform families about the ban on visits and other information 10) Valuing the nursing profession and nurses as health heroes, 11) considering a martyr for nurses who died due to COVID-19 infection, 12) taking the attraction of policy makers to nursing (at least temporary), 13) Media coverage of nursing career issues. Although these changes and interventions were not based on the defined program, all were performed by the action research team to deal with the issues identified in the first cycle. Therefore, these interventions were considered additive action plans along with the initial interventions in the third cycle. Hence, five months after the intervention, the researcher entered the fourth step or the evaluation phase after temporarily stabilizing circumstances.

Fourth step

Evaluation after changes (Reflections): Action research evaluations are usually performed during the research and at the end; however, it is preferred to consider the evaluation process at planning because it provokes the team members to keep the obstacles in mind through the study period. During the evaluation phase, the process is examined. The evaluation was performed during the research process, and qualitative interviews with six nurses, four managers, ten patients' companions, and some recovered patients. Questions included; "Tell us about your feelings about caring for patients during the outbreak", "How did you feel when you met the elderly and young patients and how did you feel in providing care?", "Tell us about your tensions, worries, and tiredness", "Tell us about the feedback from patients' families and others about these cares". Sample interview questions from patients and companions included; "tell us how nurses treated you?", "did nurses consider all your needs and how?", "tell us about your feelings about nurses", "did you feel that nurses would make an unjust or prejudicial distinction between patients?". Sample interview questions with managers; "Tell us about your feelings and experience in the ward with nurses and patients during the COVID-19 outbreak? Or if they changed than before?", "Did you face family requests? How did you respond?", "What did you ask from senior managers, and what did they do?", "how do you evaluate the community support and the term of health defender?" Finally, quantitative questionnaires were filled by phone call or online.

Findings

Qualitative results

Based on the stages of the research activities in the first stage, we identified 367 initial codes, 16 subcategories, and four main categories. The main categories were depicted with a sample of quotes from the participants.

Insufficient understanding of nurses and companions about each other's plans, needs, and expectations

Some patients 'companions insist on following patients' condition and treatment process and showing their desire to care for them. On the other hand, staff consider their presence unnecessary and hence are reluctant to communicate with them. These problems indicate an important issue in the ward, i.e., nurses do not understand the needs and desires of companions, and on the other hand, companions do not feel working conditions, limitations, and needs of nurses. "Unfortunately, our people have a low social status and do not have medical literacy, so it takes much time if you want to tell them what is the condition of their patient, so I prefer not to explain (Nurse 2)."

The use of personal and situational reasoning rather than ethical principles

Some nurses cannot make the right decision based on ethical standards to provide appropriate care in

critical circumstances. Perhaps in such cases, provided care is based on the situation and the feelings and not according to the principles of care. "Caring for patients with a low level of consciousness is of no use and only takes time and energy …. I do not have a specific suggestion for caring for these patients, but my colleagues say that if such patients are transferred to the ward, they would be expired sooner" (Nurse 3).

Caring Stagnation

The difficulty of workload in intensive care units and lack of a clear understanding of the role and rights of nursing would lead to insufficient care of some nurses to provide all the needs of patients in the intensive care unit, burnout, and distrust to nurses. Some nurses try to do their duties with an impression of insouciance in response to not being seen in the workplace. When some nurses feel that there is no difference between committed and others who irresponsibly perform their duties, they might be irresponsible, leading to a caring stagnation. "Look, this is a special ward. Nurses here should be different from those in other wards. Some nurses just do what the doctor says, and they do not think whether an ordered arterial blood sampling is really necessary or not" (Nurse 19).

Feeling satisfaction with care

This category is characterized by the spiritual excellence of receiving internal and external feedback, responding to the call of conscience, attention to mutual appreciation of the patient-nurse, and sensitivity to the needs and vulnerability of patients. Although nurses work in the intensive care unit with high pressure and workload, they experience a sense of accomplishment in dealing with patients after recovery and positive feelings such as appreciation from patients and their families. A nurse is telling about her response to the call of conscience; "Well, patients who are admitted here should receive substantial care. I have two patients, and I cannot argue that my patients are too many because of the torment of conscience and the rights of people, because I owe to her, it is because I perform my duties". (Nurse 10)

After designing the planned programs and using COVID-19, a final evaluation by guided content analysis was performed, identifying 211 initial codes, 13 subcategories, and four main categories.

Understanding the needs and concerns of the patient and family and empathy by nurses, and mutual satisfaction

With social awareness about the disease and the importance of the role of nurses in the community, families could understand the needs and desires of nurses to some extent and avoid frequent and unnecessary visits to the hospital. On the other hand, the nurses preferred to provide information to the companions by telephone. "I was completely satisfied; we pray a lot... it was very good... I talked to them very sincerely and normally... they also explained... I called a lot... The calls were also very good, and they explained there is no need to come to the hospital anymore... we were relieved that our patient was receiving appropriate care" (Companion 6).

No discrimination and substitution of ethical judgment over personal feelings

Nurses often cared for patients in critically ill patients regardless of age without any underlying disease in the recent outbreak. However, they always tried to care for younger ones more than others, but it was not predominant. "Most nurses had more attention to the youth because they had a more life expectancy, but the elderly ones are also beloved in a family and should be considered as well. I did not prioritize younger ones; if I have two or three patients, I should take care of them equally" (Nurse 7).

Birth and germination of a humanistic care

With the advent of the COVID-19 outbreak, some voluntary movements were adopted by the action group (nurses, doctors, managers of different categories, families, and society), leading to the germination of humanistic care during the first days of the crisis, dealing with threatening experiences, understanding the situation and strengthening of empathy and humanistic interaction and providing the needs of the caregiver and patients. This demonstrated an enhancement in values and reinforcing elements of care in nursing. In particular, experience gathering, understanding the situation, strengthening empathy and humanistic interaction, and providing the needs of the caregiver and patients and nurses led to an increase in the quality of nursing care. "The deaths of people in front of our eyes! They came with initial shortness of breath, and their families were worried... Suddenly these patients became ill and ventilated, and died; it was a severe crisis and stress. But well, we got over it, and I am very happy that I was able to do my job properly" (Nurse 5).

Growing satisfaction from humanistic care

The COVID-19 pandemic provoked patients, families, and others in the community who had less contact with nurses to appreciate this group of health care providers differently. Hypersensitivity of nurses and their efforts and empathy to save patients' lives, avoid malpractice, and appreciate family and community members for their services by social respect brought higher vitality and spiritual excellence for them than before, which led to their satisfaction with care. "One issue that motivated us was the feedback from the benefactors and people by multimedia; they said god bless you! Patients will need you... or we would tell the colleagues to do your best, they need us, and it was real (Nurse 1)."

Quantitative results

In this study, the variables; Nurses' Quality of working life, Quality of Patient Care Scale

(QUALPAC), Caring Nurse-Patient Interactions Scale-CNPI were measured using questionnaires (Table 2).

Table 2) Comparison of mean±SD scores of the variables before and After the COVID-19 Outbreak

Overall score	Before	After	p.
Quality of working life	198.57±13.19	213.70±15.09	0.08
Quality of Patient Care Scale	247.94±34.61	249.09±29.30	0.06
(CNPI-23Nurse)	58.10±7.34	55.50±4.45	0.006
(CNPI-23Family)	54.30±8.58	60.50±4.90	0.003

Among the dimensions of quality of work-life, managerial performance (49.55±5.11), professional status (32.40±4.23), adaptability (20.10±4.54), communication (26.90±2.95), and external motivation (20.90±2.10) were higher than before the intervention. Also, workload and shift works were increased due to the increased activity of nurses during the COVID-19 outbreak. On the other hand, the validity-proficiency factor was decreased. There was a statistically meaningful association ($p<0.05$) between professionalism, adaptability, and external motivation before and after the intervention. All the dimensions of CNPI increased in patients' families, but among nurses, only clinical care (24.05±1.73) was more than before the intervention. There was a significant association between communicational and humanistic care and the overall score of the questionnaire in both family and nurse groups ($p<0.05$).

Among the quality of nursing care questionnaire dimensions, the communicational (48.80±7.68) and physical dimensions (98.30±12.62) were more than before the intervention. The only significant association was between the physical dimensions before and after the intervention ($p<0.05$). Overall, this study quantitatively investigated the outcome variables, including quality of humanistic nursing care, caregiver-patient / family interactions, and quality of working life. Because the result of the theory of unsparing response to the situation is a success, and success is accomplished by satisfying humanistic needs and achieving professional goals. Satisfaction is the goal, motivation, and result in the process of unsparing response to a situation. Before the intervention, nurses' quality of working life with a total score (198.57±13.19) confirmed care stagnation, which increased (213±70.09) after the intervention, indicating germination of humanistic care.

Moreover, after the intervention, nurses understood patients' needs and concerns, emphases, mutual satisfaction, and non-discrimination, and the substitution of moral reasoning for personal judgment occurred. According to families' ideas, there was an increase in communicational care by nurses during the COVID-19 outbreak, despite the fact, nurses believed in lower communicational care due to personal protective equipment.

On the other hand, the quality of nursing care before and after the intervention differed significantly, but it was higher. This finding is related to the germination of satisfaction from humanistic care after the intervention. Nurse satisfaction can be seen in the quality of nursing care provided.

Discussion

Since the concept of humanistic care is completely subjective and nurses' perceptions of this concept were different, explaining this concept was difficult and complex. On the other hand, this study was designed and implemented based on an "unsparing response to the situation". The theory of operational steps to humanize care is not clear. Extracting and inferring these operational steps and sharing them with nurses in an understandable way made things a little harder. The study was the arrival of the COVID-19 virus and the non-continuation of the planned programs, which, considering the measures taken in the COVID-19 crisis, as a spontaneous intervention, tried to facilitate the process of continuing the work. "Understanding the needs and concerns of the patient and family, empathy by nurses and relative mutual satisfaction", "non-discrimination and substitution of ethical reasoning on the personal judgment"," birth and germination of humanistic care" and "growing satisfaction from humanistic care" were observed in nurses of intensive care units by a facilitating effect of the COVID-19 outbreak. This shows the accuracy of the theory of unsparing response to a situation.

According to the supporting model, nurses can move from an "unsuccessful response to their rights" towards an unsparing response to the situation by understanding the situation's sensitivity. This occurs in the background of the synergy of situation-education/learning theory. COVID-19 crisis encouraged nurses to move towards care rewards as spiritual benefits. Undoubtedly, fear is an unavoidable by-product of the outbreak of an infectious disease [18]. In addition to the nurse, fear and anxiety in the patients' families increase sharply after an epidemic. The ban on visits to hospitals added to the severity of the problem. Based on qualitative findings, understanding the needs and concerns of the patient and the family and empathy by nurses, and relative mutual satisfaction provided the conditions for better care. Before the crisis, inadequate nurses and companion understandings of each other's roles, needs, and expectations were major problems in human care. But then, by changing the role of nurses in the crisis, mutual understanding is formed between nurses and companions. In the prevalence of infectious diseases, the nurse's role changes to suit the needs of the patient, family, and hospital [18].

On the other hand, health workers face special challenges in spreading infectious diseases, which provide new and unusual events with the risk of exposure. For example, fear of infection or doing

new things in an unfamiliar environment can complicate disease management. Regarding germination of humanistic care, according to the interventionist theory, it is important to upgrade the elements of care [6] and create a supportive work environment [19]. Factors such as adequate time, supportive regulations, care routines, and appropriate nurse-patient ratios act as catalysts and facilitate the nurses' responses to patient/family needs.

COVID-19 outbreak changed the situation sensitivity and facilitated a background for humanistic care. A sense of commitment to patient care compels nurses to perform their duties carefully despite a severe threat of an infectious disease outbreak. Health care providers tend to work because of their professional commitments [3]. In addition to maintaining an efficient workforce, a strong sense of professional commitment helps to improve the quality of nursing care [20, 21]. Some healthcare providers are not keen to work during the spread of an infectious disease [22], and many are absent from work [23]. But in our study, experience gathering, understanding the situation, and strengthening empathy and humanistic interaction and attention, compensating the needs of caregivers and patients and nurses led to an increase in the quality of nursing care. Demographic factors, especially gender, previous outbreak experience (especially SARS), full-time versus part-time employment status, and area of employment were among the risk perception factors in nursing care [24]. In the present study, increasing the quality of working life was associated with the confirmation of humanistic care germination. Specific working conditions in this current crisis, professionalism, and adaptability increased external motivation in the context of social conditions, but in general, there was no fundamental change in the quality of working life. The nursing profession has increased despite external motivations among colleagues and society. However, it should not be forgotten that based on qualitative findings, some nurses prefer self-quarantine [25, 26] and social distancing to escape the stigma of being infected [27] and maintain the health of family members and the community. This may not be the predominant trend under the subcategory of successful growth in humanistic care, but it is very important in discussing the nurse's emotional readiness in a crisis.

According to the theory of unsparing response to a situation, a chain of variables of perception and approval of another situation, sense of commitment and responsibility, altruism, and valuing their duties play a role in the occurrence of self-transcendence. Self-transcendence is especially important in the sensitivity of situations [9]. Workload and work shift, which were dimensions of the quality of work-life in our study, increased under the influence of COVID-19, but a significant relationship was found in their ability to adapt to the new conditions. The MERS-COV disease experience showed that nurses' workload increased during an epidemic and work stress increased with the threat of personal exposure during patient care. In contrast, many positive adaptations are formed in response to such an epidemic [18]. Changes in the quality of working life and the quality of nursing care require more time due to the effects of some other factors.

A study mentioned several strategies to deal with the Ebola epidemic, such as religious stability, a sense of serving to country and community, and support from peers and family. External strategies included training that improves staff confidence in providing care, providing personal protective equipment, a social media platform to meet the challenges, and holding workshops on ways to deal with employee-related stigma, and paying the costs of accepting the risk by personal to encourage them [28]. Voluntarily actions in our study of the program implementation tried to help nurses adapt to the COVID-19 crisis by establishing external motivators. Many nurses in their clinical practice are sometimes forced to choose non-humanistic care. In the meantime, some of them continue to work in the same field, but many of them choose another approach by adjusting their organization and clinical environment, which leads to humanistic care [5, 9, 29]. Despite this fact, others try to provide humanistic care by adjusting to their clinical environment. Nurses are always trying to provide the best possible care in the clinic despite existing problems. Using unsparing responses to the situation of appreciation and recognition is a result and one of the important dimensions of receiving the effects and rewards of care. This point is highlighted in the present study's successful growth of humanistic care with social respect and energy recovery. This study emphasizes that the unsparing response to the situation is a recessive trend and not always obligatory. In one study, three main categories of organizational, personal, and future preparedness for Ebola were identified. In this study, nurses relied on their organization to protect them against Ebola, and patient care was based on professional commitment and personal responsibilities by providing personal protective equipment to increase their self-confidence and self-protection skills [30]. Nevertheless, forgetting nurses' rights and environmental stresses due to lack of protective equipment might ignore patients' rights and prove below the standard care. In the hourglass model that humanistic care can be changed to non-humanistic care or vice versa according to the nurses' orientation in care performance and some elements in the organizational context [29].

As stated, during the implementation of the intervention and change program, the COVID-19 pandemic and the emergence of crisis and its limitations prevented the direct and continuous

presence of the researcher in the department and the implementation of the program and the formation of reflective meetings with the researcher. Although this is not a major issue and challenge in Action research, because the basis of change and intervention is the stakeholder group, the researcher has a lesser role than all other quantitative and qualitative study methods. However, because of this study's technical approach, which is based on "unsparing response to the situation theory", the continuous presence of the researcher could be effective in evaluating and modifying the program based on the theory in non-COVID-19 conditions. Therefore, it can be said that this issue is a limitation of this study.

Considering the effect of "sensitivity of situations" on the two propositions of "education/learning" and "the existence of care promotion elements", it is possible to have relations between "sensitivity of situations" and the other two propositions in the form of quantitative studies and absence, it can conduct qualitative studies and helped to develop "unsparing response to the situation theory".

Conclusion

The COVID-19 crisis turned out to be a facilitator that improved and promoted humanistic care based on the elements of the "unsparing response to the situation" model instead of providing uncontrolled fear and anxiety in healthcare providers and shortage of human resources. These elements include "the existence of care promotion elements," which were problematic at the beginning of the crisis but improved due to spontaneous managerial planning and nurses' collaborative efforts. The next element of ''sensitivity of situations'' is the nursing perception of the severity of patients' vulnerabilities and their need for assistance, which has spontaneously created and highlighted the COVID-19 crisis. Therefore, the health system managers can provide these two elements in non-crisis situations by providing facilities and supporting nurses and providing their material and spiritual rights, as well as appropriate training workshops to strengthen nurses' sensitivity and remind them of moral and humanistic values principles.

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References

1- Lim HW, Li Z, Fang D. Impact of management, leadership, and group integration on the hospital response readiness for earthquakes. Int J Disaster Risk Reduct. 2020;48:101586.

2- Spina S, Marrazzo F, Migliari M, Stucchi R, Sforza A, Fumagalli R. The response of Milan's emergency medical system to the COVID-19 outbreak in Italy. Lancet. 2020;395(10227):e49-e50.

3- Lam KK, Hung SY. Perceptions of emergency nurses during the human swine influenza outbreak: a qualitative study. Int Emerg Nurs. 2013;21(4):240-6.

4- Chung BPM, Wong TKS, Suen ESB, Chung JWY. SARS: caring for patients in Hong Kong. J Clin Nurs. 2005;14(4):510-7.

5- Khademi M, Mohammadi E, Vanaki Z. A grounded theory of humanistic nursing in acute care work environments. Nurs Ethics. 2017;24(8):908-21.

6- Khademi M, Mohammadi E, Vanaki Z. Appraisal of the applicability of humanism based nursing theories. Med Eth Hist Med. 2012;5(3):33-46. [Persian]

7- Evangelista VC, da Silva Domingos T, Cerântola Siqueira FP, Mara Braga E. Multidisciplinary team of intensive therapy: humanization and fragmentation of the work process. Revista brasileira de enfermagem. 2016;69(6):1099-107. [Portuguese]

8- Amin S, Chin J, Terrell MA, Lomiguen CM. Addressing challenges in humanistic communication during covid-19 through medical education. Front Commun. 2021;6:14.

9- Khademi M. Analysis and development of Paterson and Zderad's humanistic nursing theory [dissertation]. Tehran: Tarbiat Modares; 2013. [Persian]

10- Coghlan D. Doing action research in your own organization. Thousand Oaks: SAGE Publications Ltd; 2019.

11- Kemmis S, McTaggart R, Nixon R. The action research planner: Doing critical participatory action research. Berlin: Springer Science & Business Media; 2013.

12- Vagharseyyedin SA. Designing and standardizing of Iranian nurses quality of work life scale [dissertion]. Tehran: Tarbiat Modares University; 2011. [Persian]

13- Zaman Zadeh V, Moghadasiyan S, Vali Zadeh L, Haghighi Khoshku N. Comparing the patients and nurses viewpoints about the nursing care quality Offered in educational hospital. Nurs Midwifery J. 2004;1(2):37-45. [Persian]

14- Cossette S, Cara C, Ricard N, Pepin J. Assessing nurse–patient interactions from a caring perspective: report of the development and preliminary psychometric testing of the Caring Nurse–Patient Interactions Scale. Int J Nurs Stud. 2005;42(6):673-86.

15- Elo S, Kyngäs H. The qualitative content analysis process. J Adv Nurs. 2008;62(1):107-15.

16- Ryan F, Coughlan M, Cronin P. Step-by-step guide to critiquing research. Part 2: qualitative research. Br J Nurs. 2007;16(12):738-44.

17- Hennink M, Hutter I, Bailey A. Qualitative research methods. Thousand Oaks: SAGE Publications Ltd; 2020.

18- Stirling B, Hatcher J, Harmston J. Communicating the changing role of a nurse in an epidemic: the example of the

MERS-CoV outbreak in Saudi Arabia. J Healthc Commun. 2017;2(3).
19- Belfroid E, van Steenbergen J, Timen A, Ellerbroek P, Huis A, Hulscher M. Preparedness and the importance of meeting the needs of healthcare workers: a qualitative study on Ebola. J Hosp Infect. 2018;98(2):212-8.
20- Corley A, Hammond NE, Fraser JF. The experiences of health care workers employed in an Australian intensive care unit during the H1N1 Influenza pandemic of 2009: a phenomenological study. Int J Nurs Stud. 2010;47(5):577-85.
21- Jang Y, You M, Lee S, Lee W. Factors associated with the work intention of hospital workers' in South Korea during the early stages of the COVID-19 outbreak. Disaster Med Public Health Prep. 2021;15(3):e23-30.
22- Mitchell R, Boyle B, Von Stieglitz S. Professional commitment and team effectiveness: a moderated mediation investigation of cognitive diversity and task conflict. J Business Psychol. 2019;34:471-83.
23- Wong EL, Wong SY, Kung K, Cheung AW, Gao TT, Griffiths S. Will the community nurse continue to function during H1N1 influenza pandemic: a cross-sectional study of Hong Kong community nurses?. BMC Health Serv Res. 2010;10:107.
24- O'Sullivan TL, Phillips KP. From SARS to pandemic influenza: the framing of high-risk populations. Nat Hazards. 2019;98:103-17.
25- Matlock AM, Gutierrez D, Wallen G, Hastings C. Providing nursing care to Ebola patients on the national stage: the National Institutes of Health experience. Nurs Outlook. 2015;63(1):21-4.
26- Englert EG, Kiwanuka R, Neubauer LC. 'When I die, let me be the last.' Community health worker perspectives on past Ebola and Marburg outbreaks in Uganda. Global Public Health. 2019;14(8):1182-92.
27- Smith PW, Boulter KC, Hewlett AL, Kratochvil CJ, Beam EJ, Gibbs SG, et al. planning and response to Ebola virus disease: an integrated approach. Am J Infect Control. 2015;43(5):441-6.
28- Raven J, Wurie H, Witter S. Health workers' experiences of coping with the Ebola epidemic in Sierra Leone's health system: a qualitative study. BMC. 2018;18:251.
29- Beltran Salazar OA. Impersonal care or humanized care: a decision made by nurses? hourglass model. Invest Educ Enferm. 2016;34(3):444-455
30- Baduge MSP, Morphet J, Moss C. Emergency nurses' and department preparedness for an ebola outbreak: A (narrative) literature review. Int Emerg Nurs. 2018;38:41-9.