Experience of discomfort and its self-management strategies in ICU patients

Pouran Tavakoli¹, Mohammad Ali Cheraghi², Simin Jahani³, Marziyeh Asadizaker³

¹Ph.D. Candidate, School of Nursing and Midwifery, Nursing Care Research Center in Chronic Disease, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ²Intensive Care & Management Nursing Department, School of Nursing and Midwifery, Research Center of Quran, Hadith, and Medicine, Spiritual Health Group, Tehran University of Medical Sciences, Tehran, Iran, ³Department of Medical and Surgical Nursing, School of Nursing and Midwifery, Nursing Care Research Center in Chronic Disease, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

Abstract

Introduction: Discomfort in patients admitted to the ICU occurs due to various reasons and leads to a stressful situation in these patients. Discomfort significantly affects the ability to cope psychologically, the process, and results of treatment. The aim of this study was to investigate the experiences of discomfort and its self-management strategies in patients admitted to the ICU.

Methods: This qualitative study was conducted in the period of September 2019 to December 2020 through in-depth interviews with 13 patients admitted to the ICU who were selected by purposive sampling. Interviews continued until data saturation. All interviews were recorded, transcribed, and analyzed using MAXQDA18 software by the conventional Lundman and Graneheim content analysis method.

Results: The two main themes including “hospitalization with anxiety” and “coping with the horror of ICU” emerged from the uncomfortable experiences of patients admitted to the intensive care unit. “Hospitalization with anxiety” included five subthemes: “fear of disability and possible death,” “separation from family,” “understanding ambiguity and contradiction in treatment,” “environmental disruptors,” and “painful and unfamiliar devices and treatments.” “Coping with the horror of ICU” included three subthemes: “recourse to spirituality,” “benefiting from psychosocial coping,” and “information search.”

Keywords: Discomfort, intensive care unit, self-management

Introduction

As the population grows and societies become industrialized, the demand for intensive care is increasing and millions of people are admitted to the ICU due to health crises each year around the world. The purpose of creating an ICU is to provide the highest quality care for all severely injured patients.¹,² In ICU, specialized human resources try to provide the best medical and care services to patients using advanced technological equipment. According to the results of studies, specialized care in the ICU has increased the hope of recovery of patients in life-threatening conditions. These treatments have significantly increased patient return to life by reducing their mortality.³ In recent years, good access to intensive care is one of the important components in evaluating the efficiency and quality of health care devices, which indicates the prominent role of the ICU in achieving therapeutic and patient care goals.⁴

Staying in the ICU potentially saves lives, but admission to this ward does harm to patients. The extent of ICU injuries...
Therefore, paying attention to patient comfort is of particular importance. One of the professional goals of nurses is to ensure patient comfort. This can be achieved by understanding the needs of care and performing scientific, human, ethical, and communication care; therefore, it is necessary to identifying and how to do it in patients. 

Understanding the causes of discomfort in patients and their self-management strategies can broaden the efficacy of therapists and help them to adjust the conditions that cause discomfort in patients. Therapists, by accessing patient's sources of discomfort during care, support them against these factors, and by recognizing patient's self-management strategies, plan and take action to maintain and strengthen these strategies. Previous studies have often been quantitative and focused on specific aspects of discomfort, and patients’ self-management strategies have rarely been considered. A qualitative approach was chosen for the present study because deep and comprehensive knowledge of phenomena is usually provided by qualitative studies. Therefore, the present study was performed to achieve the experience of discomfort and its self-management strategies in ICU patients.

Materials and Methods

Study design

The present study was conducted using a qualitative method using content analysis to gain a deeper understanding of participant's experiences regarding the experience of discomfort and its self-management strategies in ICU patients between September 2019 and December 2020. Qualitative study method is useful in clarifying the relationships between variables and achieving a new attitude, describing and visualizing areas that have not been well studied, and is helpful in understanding social phenomena from the perspective of people involved. This study was performed in the ICU of Ahvaz Teaching Hospitals, Khuzestan Province, in southwestern Iran.

Sampling

This study was performed with the participation of 13 patients. Participants were selected using purposive sampling. Participation of participants was based on their willingness to share their experiences and in a purposeful way. Patients were conscious for at least 72 hours after admission to the ICU and had no acute pain at the time of the interview. Participants' differences in age, sex, education, occupation, and marital status were taken into account for maximum diversity.

Data collection

In this study, in-depth face-to-face interviews were the main method of data collection. Interviews were conducted in the patients' unit at a time when therapists were not caring for them. The interviews were recorded by a tape recorder. At the end of the interviews, field notes were recorded and used in the analysis process. Thirteen patients were interviewed 14 times (one patient was interviewed twice) for 35 to 50 minutes. The interviews began with general questions such as “How did you experience comfort in the ICU? When did you feel comfortable? What made you uncomfortable? What do you do when you experience discomfort, and how do you feel about doing it?” Probing questions such as “Can you give an example of this? and Please explain more about this.” were also used according to the concepts in the participant’s statements.

Data analysis

Data were collected and analyzed at the same time. After listening several times, the interviews were implemented in Microsoft Word. Data analysis of this study was performed using content analysis method according to 5 steps of Graneheim and Lundman method. The resulting texts were coded word by word or sentence by sentence or even paragraph by paragraph. Then, the classification process began by comparing the resulting codes and based on their similarities and differences. First, subthemes were formed, and then themes emerged by constantly comparing them and performing the act of reduction. To ensure attention to the whole data, the text of the interviews and the coding were repeated several times. The analysis started after the first interview and continued until new data appeared. In order to verify the data and the extracted codes, the texts of the interviews and the codes extracted from them were provided to the participants, which the majority of whom confirmed the items. In order to review the text of some of the interviews, the extracted codes and themes, in addition to the research team, were reviewed and applied by three faculty members who were familiar with the qualitative research method. Diversity in the selection of participants was considered to increase portability. Encryption was managed using MAXQDA18 software.

Ethical considerations

This study was approved by the ethics committee of Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran with
the code IR.AJUMS.REC.1398.269. Ethical considerations included taking informed consent from participants, reassuring participants that information was confidential, keeping participants confidential, obtaining permission to record their voices, and voluntarily participating in the study.

**Results**

**Sample specifications**

Thirteen participants in the study included 5 females and 8 males, aged 17–61. Participants’ level of education ranged from elementary to bachelor’s and 77% were married. The details of the participants are given in Table 1.

**Content analysis**

530 open codes and 190 initial codes were obtained from the analysis of 14 in-depth interviews which were categorized after continuous comparison. The result was 2 Themes and 8 Subthemes [Table 2].

1- Hospitalization with anxiety

Because patients are admitted to the ICU following the occurrence or potential risk to their health and life; therefore, after this hospitalization, stress is applied to the patient from various sources. The stresses cause the patient to lose peace and discomfort and subsequently occur such things as irritability, anxiety, restlessness, and intolerance to procedures. Patients have many experiences with stressors. Almost all participants in the present study share their experiences, including fear of disability and possible death, separation from family, perception of ambiguity and contradiction in treatment, environmental disruptors, and unfamiliar devices and painful procedures, which were cited as reasons for their discomfort in the ICU.

1-1- Fear of disability and possible death

According to most participants, ICU patients are at the end of their life. They stated that patients admitted to the ICU were likely to die soon or with a disability be unable to return to normal life. In this regard, one of the participants stated:

> “I was very scared when I opened my eyes after the surgery and realized I was in the ICU. I told myself I was done!” (Patient, 53-year-old man).

Another participant, whose sister had previously had her spinal cord amputated, said: “Every time they said ICU, I immediately thought of spinal cord amputation and things like that. After the lumbar disc surgery, I was very shocked when I saw myself in the ICU. I always thought I had my spinal cord amputated. I was scared, even my legs were numb and did not move.” (Patient, 43-year-old woman).

Another contributor stated:

> “A few days after the accident, when I came out of a coma and realized I was in the ICU, I was really scared.” (Patient, 19-year-old man).

| Participant | Gender | Age | Marital status | Educational level | Type of ICU | Days of hospitalization |
|-------------|--------|-----|----------------|-------------------|-------------|------------------------|
| P1          | M      | 41  | Married        | Bachelor          | Surgery ICU | 7                      |
| P2          | M      | 35  | Married        | Diploma           | General ICU | 5                      |
| P3          | F      | 61  | Married        | Associate Degree  | Neurosurgery ICU | 6                  |
| P4          | M      | 19  | Single         | Student           | Surgery ICU | 15                     |
| P5          | F      | 30  | Married        | Bachelor          | Surgery ICU | 4                      |
| P6          | F      | 17  | Single         | Student           | Orthopedic ICU | 3                  |
| P7          | M      | 53  | Married        | Elementary        | Neurosurgery ICU | 9                  |
| P8          | M      | 29  | Single         | Bachelor          | General ICU | 6                      |
| P9          | M      | 48  | Married        | Associate Degree  | Orthopedic ICU | 3                  |
| P10         | F      | 43  | Married        | Bachelor          | Surgery ICU | 8                      |
| P11         | M      | 40  | Married        | Bachelor          | Neurosurgery ICU | 13                |
| P12         | M      | 34  | Married        | Diploma           | Orthopedic ICU | 4                  |
| P13         | F      | 52  | Married        | Associate Degree  | Surgery ICU | 5                      |

| Experience of discomfort and its self-management in ICU patients | Hospitalization with anxiety | Subtheme |
|---------------------------------------------------------------|------------------------------|---------|
| Fear of disability and possible death                          | Understanding ambiguity and contradiction in treatment |
| Separation from family                                          | Environmental disruptors     |
| Unfamiliar devices and painful treatments                       | Recourse to spirituality     |
| Coping with the horror of ICU                                   | Benefiting from psychosocial coping |
|                                                               | Information search           |

Table 1: Participant’s specifications

Table 2: Themes and subthemes of coping with the experience of discomfort in the ICU as the main theme
1-2- Separation from family

Participants were upset by the separation from their loved ones and suffered from it. They stated that being away from their loved ones made it difficult for them to endure difficult physical and mental conditions. Patients also believed that meeting with loved ones brought them peace of mind and increased their hope of recovery. In this regard, one of the participants stated:

"When I am deprived of seeing my family in these difficult circumstances, it is clear that I am getting stressed. I really want to separate all the devices from myself and go to them." (Patient, 52-year-old woman).

In this regard, another participant stated:

"Why don’t they let the family remember us? Only one hand moves from behind the glass. I do not hear their voices either. Because I do not understand what they are saying, I get upset." (Patient, 41-year-old man).

Some patients said they were worried about their companions in the hospital and worried about their possible problems. In this regard, one of the participants stated:

"I am always worried about my daughter who is waiting around the clock in the hospital and in the ICU. Am I worried about getting food? I do not know where she rests. I’m afraid she’ll get so sick!" (Patient, 48-year-old man).

1-3- Understanding ambiguity and contradiction in treatment

Most participants were interested in honest communication, frankness, and truth-telling from therapists, especially physicians, about their treatment status. They stated that therapists often make contradictory statements about their condition and hope for treatment and recovery, which causes confusion and ambiguity in their minds. Feelings of powerlessness, fragility, and vulnerability following confusion and ambiguity lead to their discomfort. In this regard, one of the participants stated:

"Today, the doctor comes and says that the operation was very good, you will get up soon and you will not have any special complications. Tomorrow another doctor will come and say that it is too early for me to comment. Maybe you will have a series of complications after the operation!" (Patient, 35-year-old man).

Another participant said:

"The doctor must explain to me clearly what happened! I need to know what happened to me or what might happen next! It’s my right to tell me honestly whether I will be treated or not!" (Patient, 29-year-old man).

The unavailability of some of the required drugs, the poor quality of the available drugs, the incompatibility of drug prices with patients’ financial ability, insufficient insurance coverage, and the high cost of treatment lead to more confusion and discomfort in patients. In addition, participants are expected to receive new and up-to-date treatments that help reduce their discomfort by increasing their hope of recovery. In this regard, one of the participants stated:

"First of all, for the operation of such and such a device, it is necessary that my family, with a thousand efforts, procure it from another city at a high price. Needless to say! ‘Well, that upset me a lot.’ (Patient, 30-year-old woman).

In this regard, another participant stated:

"The doctor who visited me the first week said that some medicine would help you a lot. My family, with a thousand misfortunes, provided that expensive medicine, even though the insurance does not accept that medicine; but the next week, when the ward doctor changed, he said that this medicine had no special effect on my illness!" (Patient, 48-year-old man).

1-4- Environmental disruptors

According to the participants’ experiences, the ICU-specific environment includes factors and conditions that overshadow patients’ comfort and lead to their discomfort; these include therapists’ actions during fluctuations in patients’ vital signs, care of connections and devices, and interference with comfortable sleeping position, immobility, and sleep disturbance due to staff noise and lighting, heating, and cooling system problems. Fan was observed in field observations near the bed of some patients. Participants stated:

"When a patient becomes ill, the ward falls apart, all the doctors and nurses are gone. This upsets me. I know they are rescuing someone from death, but I am subconsciously restless and upset." (Patient, 29-year-old man).

Another contributor stated:

"I cannot sleep well here. I must be careful that these devices do not separate from me so that they sound the alarm! You can’t sleep in the light either. I wake up to their noise when I fall asleep by force." (Patient, 48-year-old man).

Another participant who had problems with immobility said:

"It’s very difficult to be in bed all the time. Sit or lie down all the time. Neither mobile nor TV! I wish I could come down a little, walk a little." (Patient, 17-year-old woman)

Fan was observed in field observations near the bed of some patients. In this regard, one of the participants said:

"It’s not right at all that the ICU does not have a cooling system, I was very upset by the heat, so my family brought me a fan." (Patient, 41-year-old man).

1-5- Unfamiliar devices and painful treatments

Life-saving measures in the ICU are performed using technological devices and specialized procedures, the unfamiliarity of which is frightening and uncomfortable for the patient. One of the participants said about the arterial line in his hand and its connection to the manometer.
“For example, this thing that I put on my wrist makes me both annoyed and afraid to make the slightest move, because I think it will break and be dangerous for me!” (Patient, 33-year-old man).

A series of procedures that are performed daily and sometimes continuously to check the patient’s condition and vital signs cause pain and discomfort for the patient. One of the patients said about taking an arterial blood sample to control blood gases: “They insert this needle into a vein ten times a day, it hurts a lot! Not once or twice! All pain! How many times a day is it necessary to check blood gas!” (Patient, 17-year-old girl).

**2- Coping with the horror of ICU**

Participants used strategies to moderate the situation and reduce their discomfort, including recourse to spirituality, benefiting from psychosocial coping, and seeking information.

**2-1- Recourse to spirituality**

Almost all participants in the study mentioned that they use spirituality to help them cope with the situation. Hope in God was cited as the most important comforting factor, and they used spiritual beliefs such as trusting in God and being content with God’s providence to reduce their unhappiness. In this regard, one of the participants said:

“At first I was very confused about why I have a tumor in my head! I was upset about everything. I thought that if I died, I and my family would be relieved; but little by little I collected myself. I trusted in God and said, ‘God, you made me sick, and heal me.’” (Patient, 34-year-old man).

A patient who suffered multiple fractures in a severe accident but survived stated:

“It is true that everyone broke the cap, but I thank God that I survived and my mother did not see my death. By this, God proved his mercy to me, because if I died, my mother would be destroyed.” (Patient, 19-year-old man).

In one of the field observations, the patient’s secret and need and raising his hands to the sky was observed. At the end of the prayer, he said:

“I know that everything is under the power of God. If he wants to, he will heal me. If he does not want to, I am satisfied with God’s will. Even if I am not well, I still know that it is not good, otherwise it is not difficult for God.” (Patient, 61 year-old woman).

**2-2- Benefiting from psychosocial coping**

Participants tried to use self-management strategies to maintain and strengthen their morale, and benefited from such things as positive thinking, comparing themselves to those with more serious illnesses, and hope for the future. In this regard, one of the participants said:

“I tell myself the world has not come to an end! I’m still alive. I think of those who have a malignant disease and are waiting to die. Then I get in the mood and think of good days in the future.” (Patient, 41-year-old man).

Another contributor commented on the motivation:

“People’s health varies. They may be healthy one day and sick the next! After all, illness is a part of life. A strong man is one who leaves behind hard days!” (Patient, 35-year-old man).

Hope for healing and having a good day ahead were some of the things the participants enjoyed. In this regard, one of the participants said:

“I know that now medical science has advanced and someone is being treated for my condition, I just have to endure until the treatment is complete.” (Patient, 30-year-old woman).

Participants also acknowledged that they have used available resources, including support from family and friends, in an effort to cope. In this regard, one of the participants stated:

“My family is working hard to treat me. Being by my side all the time. Do not leave me in the hospital for a moment. I will not hesitate to do anything for the cost of my treatment.” (Patient, 29-year-old man).

Benefiting from good communication with therapists was also one of the strategies to increase tolerance in some participants. In this regard, one of the participants said:

“It’s very difficult to stay in the ICU. You do not see anyone, all in bed and a series of devices that are connected to a person and make noise. I try to talk to the doctor and the nurse, even joking.” (Patient, 48-year-old man).

Married patients also cited the role of their spouses as a source of hope and effort to endure the situation and return to life. In this regard, one of the participants stated:

“From the first day I had a headache, I went to the doctor at my husband’s insistence, and my action was at his insistence. Now that everyone is cheering me up.” (Patient, 43-year-old woman).

**2-3- Information search**

Information search was a common strategy among all participants. Gaining knowledge and information about the disease and its complications, as well as medications and treatment was one of the methods used by the participants in this study. Prognosis was the most important factor in disease tolerance. In this regard, one of the participants said:

“I was shocked to hear that I had this disease. But when the doctor explained the illness and treatment to me, I came to my senses and prepared for treatment.” (Patient, 38 years old).

In the search for information, the manner and extent of response to treatment was of particular importance to participants. In this regard, one of the participants said:

“I really wanted to ask the doctor how I was doing. What percentage was successful?” (Patient, 41-year-old man).
The search for information was not limited to physicians and other therapists, and participants reportedly sought help from sources such as the Internet and other people’s experiences. In this regard, one of the participants stated:

“After talking to the doctor, I started searching in the Internet.” I found a lot of information, of course I did not understand all of it, but it was very good.” (Patient, 35-year-old man).

Discussion

In the present study, the experience of discomfort and its self-management strategies were considered in ICU patients. Participants used ICU coping strategies to respond to their anxiety-induced hospitalization experience. The concept of the experience of anxious hospitalization, which is derived from the experiences of the participants, is formed following the fear of disability and possible death, separation from loved ones, understanding of ambiguity and contradiction in treatment, environmental disruptors, and unfamiliar devices and painful procedures. The stress of ICU admission and the loss of patient comfort have been noted in many studies because this hospitalization is usually unexpected and signals a threat to a person’s vital condition. Many ICU patients either find themselves at risk of death or are likely to develop a disability. The likelihood of imminent death makes patients uncomfortable because they generally see the ICU as a place to care for dying patients. Separation from family is another issue that bothers ICU patients. Patients and their families experience severe anxiety when separated from each other. Also, one of the sources of discomfort in the participants of this study was the understanding of ambiguity and contradiction in treatment, which has been considered in many studies. Patients expect to receive clear and accurate information and hearing the prognosis and treatment is one of their preferences. The nature of the ICU and its prevailing conditions for the survival of patients include factors that impair patient comfort. Because the ICU environment is mainly based on continuous observation and monitoring of the patient and has a unique complexity to achieve this goal, these conditions mainly interfere with patients’ sleep and lead to their inactivity. Unfamiliar devices and painful procedures have also led to the discomfort of the study participants, which is consistent with many studies. Pain is a common and distressing symptom experienced by intensive care patients at a rate of 40%–77%. Participants used spirituality, psychosocial coping, and information search to counter the horror of the ICU. Recourse to spirituality was widely used by participants. In fact, religious-spiritual confrontation is aided by faith, religion, or spirituality in coping with stressful situations and enduring critical moments throughout life. The results of studies show that resorting to spirituality is useful in managing stress and coping with difficult situations. Patients try to endure the situation and maintain their mental health by hoping for the presence and power of God. Participants have used items such as positive thinking, hope for treatment and a bright future, self-motivation, benefiting from support resources including family and friends, and benefiting from favorable relationships with therapists in psychosocial coping, which was consistent with the results of numerous studies. The results of the present study and other studies show that psychosocial coping is effective by using the role of social support from family and friends and is a factor that can directly and indirectly affect the coping of people with severe illness. Information search was a common strategy among all participants in this study, which is supported and confirmed by the results of numerous studies. Given that obtaining sufficient information to ensure patients’ comfort allows people to anticipate and feel of control over the situation, it can be used as an effective factor. The results of other studies have shown that the lack of information about the health status, severity of the disease, its complications and treatment methods is stressful for patients. Receiving incomplete information leads to anxiety and frustration in patients, as well as the emergence of discomfort and resistance to treatment in them. Hence, patients seek information to overcome discomfort.

Conclusion

This study explained the resources related to the experience of discomfort in ICU patients and the self-management strategies of these patients in the face of discomfort. Knowing the sources of discomfort can be helpful in managing, correcting, and reducing them. Patients’ experiences of self-management strategies also highlighted the need for psychological, spiritual, and social support, as well as the need for information to cope with discomfort.

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Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patients have given their consent for their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.
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