

# Stabilizing the Situation in an Emergency Ward: A Grounded Theory Study of How Emergency Nurses Provide Care in Emergency Wards

Hosein Mahmoudi,<sup>1</sup> Eesa Mohammadi,<sup>2,\*</sup> Abbas Ebadi,<sup>3</sup> and Fatemeh Taheri<sup>1</sup>

<sup>1</sup>Baqiyatallah University of Medical Sciences, Faculty of Nursing and Trauma Research Center, Tehran, Iran

<sup>2</sup>Nursing Department, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

<sup>3</sup>Behavioral Sciences Research Center, Nursing Faculty, Baqiyatallah University of Medical Sciences, Tehran, IR Iran

\*Corresponding author: Eesa Mohammadi, Nursing Department, Faculty of Medical Sciences, Tarbiat Modares University, PO Box: 14115-333 Nasr Bridge, Tehran, Iran. Tel: +98-91214833 45, E-mail: mohamade@modares.ac.ir

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## Abstract

**Background:** Emergency room functions as the heart of a hospital, and caring is the essence of nursing in any hospital.

**Objectives:** This study conducted to illuminate the process of caring in an emergency ward based on experiences of nurses and patients.

**Methods:** The theory of caring was extracted using the grounded theory design as a qualitative research methodology. In-depth interviews with 18 nurses and 7 patients were conducted using purposive and theoretical sampling. Observation and field notes method was also used. Data were analyzed using constant comparative analysis of Strauss and Corbin.

**Results:** Situation stabilizing was defined as the core concept in participants' strategies to overcome their concern. In this basic psychosocial process, some factors functioned as a facilitator and other as a barrier.

**Conclusions:** When the final theory is appropriate to the field, it is more easily understood, and the participants apply the theory more easily, faster, and better. This leads to favorable outcomes such as patient and nurse satisfaction, reduction in crowdedness and stress, effective clinical management, increased speed, and accuracy and comprehensiveness in providing care in the emergency ward.

**Keywords:** Care Model, Grounded Theory, Emergency Nursing, Nurse Patient Interaction, Iran

## 1. Background

Care concept is one of the main concepts of nursing with a great role in the nursing literature. A Laynyngr, Pender and Watson, nursing scientists, have stated, the essence of nursing is caring (1).

In the comprehensive care, the objective is to provide the comprehensive needs of individuals through the relief to the body and the spirit. The purpose of nursing is to help patients with their requirements (2).

Having an active and fully functional emergency room is essential for an ideal treatment center. If the emergency room is nonfunctional, other hospital services will also be affected by this major defect (3).

Different treatment modalities are done in emergency rooms. Various factors such as emergency room, staff, and environment could affect the emergency room functions (4).

A good therapeutic relationship is necessary to provide effective care in the emergency room. Nurses have to communicate with patients, their relatives, and other care providers (5).

Caring is a core characteristic of the nursing profession (6). Caring is described as unclear, complex, absolute, and

indistinguishable concept in nursing literature (7). Various aspects of caring sciences are the subjects of a continuous debate among nursing scholars (8-10).

The First to third causes of mortality in Iran are related to coronary heart disease, stroke, and road accidents (48.5%), and patients with the mentioned diseases receive their first services in emergency wards; thus, improving emergency services is a priority for the Ministry of Health in Iran (11).

Over 70 000 nursing staff are engaged in Iranian hospitals to provide nursing care. The population of nurses is more than other professions that are responsible for caring the patients (12).

Road traffic injuries are the second main cause of mortality in Iran after the coronary heart disease. The main cause of road traffic-related mortality is head injury (66 %); and prehospital deaths in road traffic injuries, with 8584 (57%) deaths, have a very important role in the mortality rates due to accidents (13).

Different factors affect the caring process including cultural, economic, organizational, and social factors (14). Based on our knowledge, to date, the studies that have been conducted did not substantially assess the caring process in emergency rooms; and thus it is necessary to inves-

tigate different aspects of this process using a qualitative approach.

In this qualitative study the grounded theory was used to produce a theory.

## 2. Methods

### 2.1. Research Design

In this study, the aim was to detect the process of caring in the emergency rooms of 2 military hospitals in Tehran, Iran using grounded theory method.

### 2.2. Sample and Settings

Nurses and patients were interviewed at first. Purposeful sampling was used to select the sample. Inclusion criteria for the nurses were as follow: nurses with at least 6 months of working experience in emergency wards, the minimum educational degree for inclusion was nursing technician. Moreover, patients, who had at least a 24- hour presence in the hospital and had acute conditions, were selected.

Nurses were interviewed in the office of head nurse in the ward for 55 minutes on average. The interview was done with the patients while they were hospitalized and in bed, which took 30 minutes on average. All interviews were conducted by 1 interviewer. Field notes were also used.

Theoretical sampling was also used to sharpen the extracted category by other participants.

Then, the core variable stabilization emerged, the conceptual framework was clarified for fitness between the core variable and the other categories, and thus, theoretical saturation was reached (15).

A total of 18 nurses and 7 patients contributed to the study.

### 2.3. Data Collection

In this study data were collected using unstructured interview.

The participants were encouraged to speak freely about their experience and impressions. The initial questions were as follow: "What is done in the emergency department?; How do you care for the patients? What things are important for you in performing everyday tasks?" The following question was asked from the patients: "Can you talk about your experience in the emergency ward?" Then, the follow-up (or probing) questions were asked based on the patients' previous answers. (For example, what do you mean by this answer? Please explain further.)

Saturation was reached with interviews and observation with 25 participants.

### 2.4. Data Analysis

Data were collected, analyzed, and interpreted using the grounded theory methodology of Strauss and Corbin 1998. The emerging themes were identified through transcription and observation. The codes that were synonymous were classified in the same categories; this process is known as open coding.

In axial coding, the process data are fractured and back together in new ways by making connections between a category and its subcategory. In this study, this connection was done through the use of a coding paradigm, which focused on 3 aspects of the phenomenon (16).

This process allowed links to be made between the categories and their subcategories, and then selective coding developed the main categories and their interrelationships. The relationship between the categories was tested and one core was recognized as a stabilizing category. The theory that occurred around the core category was a substantive theory that described how nurses provide care to patients in emergency.

The authors analyzed the data independently and checked the emerging themes together. Also, they used constant comparative analyses until gathering the final report (17).

### 2.5. Ethics

Ethical approval was obtained from the ethics committee of the university (record number: 1215, May 2014). Voluntary informed and written consent was obtained from patients and nurses.

### 2.6. Trustworthiness

For confirmation, the primary code of each interview was presented for the participants. If confirmed, it was kept as such and if modified, the change was applied. Also, interviews, codes, and categories were given to 2 researchers familiar with the analysis of qualitative research methods and were asked to evaluate the process of coding (18).

## 3. Results

It was found that the main concerns of patients were their pain and suffering. Also, the main concerns of nurses were doing their tasks accurately, quickly and comprehensively.

"The main problem is my skin, every 3 months I get skin problems. I am chemically injured." (Patient 3).

'One day a 7-year-old child was brought to the emergency; an eraser was stuck in the trachea. The child was

Table 1. Analysis from Text to Theme

Meaning Units	Codes	Category	Another Category	Theme
In accidents, with patients having open wounds and open fractures, before transferring these patients, we should be splinting them.	Existence of sensitive patients in the emergency department.		Accuracy to protect patients	
Deliveries of patients from ambulance are more comfortable because primary work has been done.	The need to protect patients.	Accuracy to protect patients	Accuracy in Triage patients accuracy in reporting and accuracy in communication	Accuracy
However, patient transmission from personal vehicles is difficult and requires to be done more carefully. If the patient is on the stretcher, transport is easier and quicker.	Accuracy necessary in patient transport.			

quite cyanosed. I performed a compression with Heimlich maneuver, and the eraser was thrown out. Well, if I had not acted quickly in this case the child would have died, as in such cases; the golden time is 6 minutes. Then, we should establish intravenous lines for these kinds of patient and inject drugs; we should also do intubation rapidly.” (A nurse with 28 years of experience).

### 3.1. Stabilizing

Participants’ strategy was stabilizing that was defined as the core concept, which was extracted. Stabilizing refers to the all factors that affect caring; all participants verified this concept.

“The Emergency ward has an environment where you cannot relax mentally and physically. In such conditions, the main work is controlled by stabilization. So, we do our job better in difficult conditions.” [Nurse, 4 year-experiences].

In this basic psychosocial process, some factors act as a facilitator and others as a barrier.

### 3.2. The Role of Stress in Caring

Stress was a barrier in the realization of caring.

“My colleague was quite nervous. He took the file and went towards the head of a patient. he went there again without doing anything because of the intensity of stress.” (A nurse with 11 years of experience).

### 3.3. Ineffective Triage to Effective Triage

Effective triage was a facilitator factor in caring and ineffective triage a barrier in caring.

“A patient with a double forearm fractures referred to a general physician first. Four hours were wasted to make a splint. If it was done by appropriate triage, this time would not have been wasted.” (A nurse with 14 years of experience).

### 3.4. The Role of Crowd in Caring

High workload should get done in limited time in emergency departments, which may reduce accuracy in caring.

“Because of the crowdedness, it was not possible to provide care properly. For example, at patient who died of a heart problem in the ward recently was attended in a very busy environment.” (A nurse with 26 years of experience).

### 3.5. Ineffective Clinical Management

Shallow and non-professional supervision leads to cynicism and mistrust, and reduces nurses’ motivation to cooperate with the management.

“Unfortunately, the supervisors do not care about the quality of work criteria. Instead, they monitor the basic nursing work; their attention is mainly on routine work.” (a nurse with 10 years of experience).

### 3.6. Conflicting Roles in Caring

Another issue that caused intensified critical condition in the emergency department was stressful conflict with the nurses.

“Existence of conflict is a common and long- lasting problem in emergency wards. The relatives constantly or repeatedly ask questions. If you don’t respond, they become very upset, and if you respond, then you will lose

time to attend to the patient and your time is wasted.” (a nurse with 11 years of experience).

#### 4. Discussion

Data indicate the main concerns of patients were their pain and suffering and the main concerns of nurses were doing work accurately, quickly and comprehensively, which lead to stabilizing. In this basic psychosocial process, some factors act as a facilitator and other as a barrier.

Another study revealed that balance in the 5 dimensions of a human being is the core category in the theory of caring in nursing from an Islamic perspective. Maintenance of balance in all dimensions of human beings through the process of response, reflection, relationship, relatedness, and role modeling, which in turn results in an action, is termed caring action (19).

The concept of ‘Stabilizing’ in our study is somewhat similar to the concept of balance in all dimensions of human beings, as reported in the study conducted by Rubina Barolia and Rozina Karmaliani (2008) in Pakistan because the field and conditions were similar.

The results of a grounded theory studies revealed that caring for patients in a personalized, family-like manner has nursing practice, pedagogical, and research implications (20, 21).

In addition, in the study by Meng Meng et al. (2010) on Chinese nurses, it was determined that attitude, knowledge, ability and perceptions of caring were 4 characteristics of caring (22).

Thus, it seems that caring in emergency wards is different from the care that should be provided in other clinical settings or in different wards because the field and conditions are different; and this may be due to the fact that caring in the ED is more based on work and duty.

The study by Cutcliffe and et al (2006) in the UK study of how psychiatric nurses work with suicidal people indicated that the core variable was reconnecting the person with humanity.

So, the process of caring in our study was different from previous studies because their field and conditions were different.

In Chiovitti study (2008), protective empowering was the basic social and psychological process (23).

Because psychiatric patients are fragile and at the moment when they are referred to ED are at the peak of their psychological problems, the nurses must first protect the patients.

This acute condition may occur out of hospital.

Therefore, caring in a psychiatric ED requires conscious understanding of the patient’s condition. From the perspective of Chiovitti, the care phenomenon is problem-

oriented and patient-centered. However, our study was conducted in the physical ED and the patients with whom the nurses encountered were those with acute physical conditions, which could have threaten the patients’ life. Nurses in this study defined the meaning of care as a care appropriate to patients’ conditions; namely, conscious care, professional speed, and comprehensiveness. This view of care in the Chiovitti study was compatible with ours. At the same time, understand the process of caring in our study was different from Chiovitti study because the field and conditions were different (23).

In Chiovitti study, the nurses empowered patients who had specific conditions and vulnerabilities. This protection was given to prevent risks outside of the hospital. However, the nurses in our study tried to achieve stabilization, which is focused on maintaining current situation inside the hospital.

In our study, stress, crowdedness, and conflict have been suggested as barriers to care. Woodhouse study (1995) found the same results as our study (24). Also, occupational violence is a major problem affecting nurses around the world (25).

Lack of time and a large number of patients are barriers for the nurses to provide care, which other studies also have indicated (26-29).

In another study, it was revealed that attention of nurses working in high- volume high- quality emergency care ward can be disrupted because of inappropriate design of physical space for emergency, which was found to be an important factor in caring. The persons accompanying patients also disrupt the main tasks of nurses in the emergency department. This study found that the range of care in the emergency department is wide. Many factors are involved in the care in this sector; the emergency room colleagues and environment are important factors. Thus, to better understand the concept of care, studies with diverse and broader scope of objectives are needed (4, 30).

It seems the same nature of caring in different environments is the reason for compatibility of the results of our study.

Based on these findings, empowering nurses in different aspects including wage increase and motivation can be a step forward to achieve favorable outcomes, such as patient- nurse- and companion satisfaction, reduction in crowdedness and stress, effective management, increase in speed, accuracy, and comprehensive care in the emergency ward.

To identify the process of caring in other wards conducting more studies are recommended. We do not claim to have exhausted all possible potentially identifiable themes.

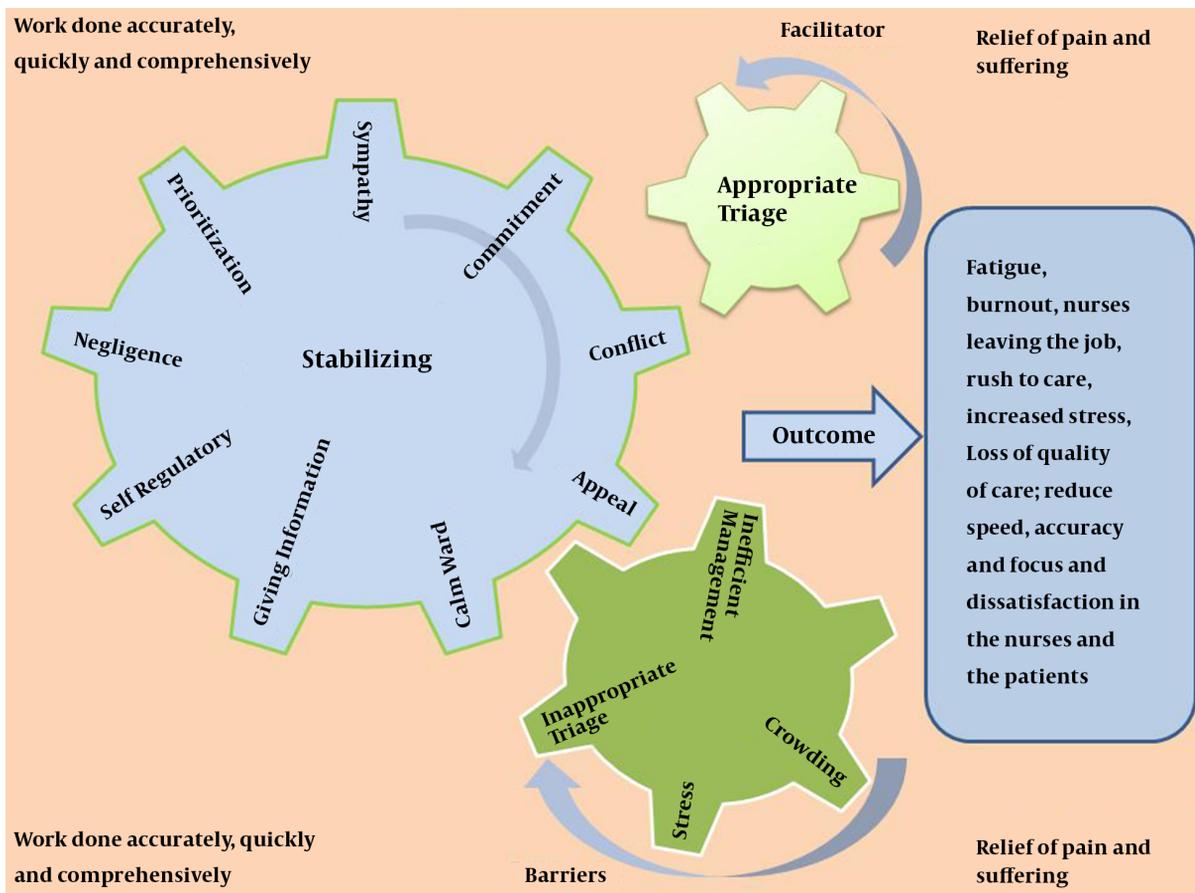


Figure 1. Stabilizing Theory

#### 4.1. Conclusions

Because the final theory was based on discovery, understanding of the facts, care factors, and practice, besides using the latest scientific knowledge and strategies, is of prime importance. On the other hand, theory is more easily understood by participants. Also, applying theory is easier, faster, and better by participants in emergency wards.

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#### Footnote

**Authors' Contribution:** Hosein Mahmoudi: Study conception and design, data collection and analysis, drafting of manuscript; Eesa Mohammadi: study conception and

design, critical revisions for important intellectual content, drafting of the manuscript, supervision; Abbas Ebadi: substantial contributions to analysis and interpretation of data, critical revisions for important intellectual content, and final approval of the version to be published; Fatemeh Taheri contributed to data collection.

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