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## Perceived Stressors of Hospitalized Patients' Family in Cardiac Care Unites: A Qualitative Content Analysis

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## Perceived Stressors of Hospitalized Patients' Family in Cardiac Care Unites: A Qualitative Content Analysis

### Abstract

The present study attempts to justify the factors inducing stress in the families of patients hospitalized in cardiac intensive care units in the east of Guilan province in Iran. The study aims at gaining an accurate understanding on these stressors for appropriate planning directed at removing or decreasing these tension-inducing components. The present study is a qualitative study based upon a conventional content analysis approach. The study population was selected through purposive sampling (28 family members of cardiac patients), and the data were gathered through semi-structured interviews. Data analysis was performed as per the stages recommended by Graneheim and Lundman (2004). The strength and scientific accuracy of the study was also established. The study yielded three main themes and seven sub-themes: Heavy shadow of illness (fear of loneliness on the caring path, fear of disease, poor personal knowledge); Hesitation in the treatment (doubting the efficiency of technology, ungenial healthcare providers); and Economic storm (high cost of treatment, potential economic problems). The study results indicated that patients' families underwent stress in various areas, pointing to the need for providing adequate training and information on the disease to family members and caregivers, as well as the sympathy of healthcare providers on the treatment path for reducing the disease-associated tensions suffered by hospitalized patients' families.

### Keywords

Cardiac, CCU, Family, Stressor, Descriptive Qualitative Research, Iran

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### Acknowledgements

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## Perceived Stressors of Hospitalized Patients' Family in Cardiac Care Units: A Qualitative Content Analysis

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### Introduction

Cardiac diseases are considered as the most common cause of death in most countries including Iran (Vahedian-Azimi, Alhani, Ahmadi, & Kazemnejad, 2009). An estimated 17.7 million people died from Cardiovascular diseases CVDs in 2015, representing 31% of all global deaths. Of these deaths, an estimated 7.4 million were due to coronary heart disease and 6.7 million were due to stroke and over three quarters of CVD deaths take place in low- and middle-income countries (World Health Organization, 2017). Low and medium income countries constitute 80% of this figure (Pourghane, Hosseini, Mohammadi, & Tabari, 2014).

Cardiac patients need extended care in different life conditions such as at home, at work and in society (Gholami, Fallahi-Khosknab, Madah, Ahmadi, Khankeh, & Naderi, 2013). Family is considered a human's most significant support system, and family members play a vital role in caring for patients (Abedi, Khademi, Daryabeigi, & Alimohammadi, 2006). Hospitalization of a family member can trigger anxiety and mental problems for other members of the family. This anxiety intensifies when the patient is hospitalized in an intensive care unit (Navidian, Sarhadi, Kykhaie, & Kykhah, 2014). In some cases, family members undergo a

higher level of stress than that experienced by the patient himself/herself (Shorofi, Jannati, & Roohi-Moghaddam, 2014).

As family members are not traditionally allowed into intensive care wards, and hours to visit ICU patients are very limited, families usually undergo high levels of stress when they are not by their patient's side and when they are waiting behind the closed doors for more information on their patient (Hoseini-Azizi, Hasanzadeh, Ehsaee, Esmaily, & Khoshbakht, 2013). Fear of death, uncertainty about prognosis and treatment, emotional contrasts, concerns over the financial aspects, changes in the roles, and disorder in daily affairs can trigger shock, anger, despair, anxiety and depression in family members especially in the first 72 hours (Shorofi et al., 2014). In the study conducted by Navidian et al. (2014) on determining the psychiatric reactions of family members concerning their patients' hospitalization in intensive care and regular wards and their comparison with those of common people in the society, the obtained results indicated higher levels of anxiety, depression, and stress in family members of the patients hospitalized in intensive care units.

The above results signify the necessity for designing and implementing family-oriented care interventions for reducing the psychiatric symptoms (Navidian et al., 2014). A few studies have been conducted in Iran regarding the stress of family patients. According to the study conducted by Vahedian-Azimi et al. (2009), the implementation of a family-centered empowerment model for patients suffering from myocardial Myocardial Infarction infarction proved to be feasible ultimately leading to improvements in their life quality. Also, Shorofi et al.'s (2014) review of pertinent literature signified that certainty over provision of adequate care to the patient, gaining information on the patient's condition, prognosis, and treatment progress were among families' most important needs. Family-centered care resulted in an increase in their satisfaction with the care provided by the treatment team as well as a decrease in psychological symptoms in these families. The interaction and relationship between the patient's family members and the treatment team at the hospital was recognized by Khosravan, Mazlom, Abdollahzade, Jamali, and Mansoorian (2014) as one of the indispensable components of care. Their study indicated the importance of relatives' participation in the care provided to hospitalized patients.

Most studies conducted on the patient's family's stress in Iran have been quantitative studies. Qualitative research with a content analysis orientation allows entry into participants' internal world as well as the chance to specify and interpret the data, meanings, and their experience at a deeper level (Pourghane et al., 2013). The descriptive, analytic and qualitative study conducted by Etemadifar, Bahrami, Shahriari, and Farsani (2015), which focused on the experiences of the family members of cardiac patients hospitalized in intensive care units, yielded three important findings out of transcript analysis: uncertainty of care-receivers, lack of organizational and family support, and belief-centered care (care based upon belief in God). The participants believed that they did not even have the basic information on the disease and drugs, and had only received slight support from the care-givers. Considering the fact families play an essential role in patients' recovery, and considering the current study's researchers' experience as nurses and clinical trainers in cardiac intensive care units, they had frequent and close contact with the family members of patients hospitalized in these wards, and witnessed the tensions they had to go through.

## **Study Purpose**

Considering the significance of this issue, as well as the fact that no such similar qualitative studies have thus far been conducted in Iran, the present study aimed to identify the tension-inducing factors in the families of patients hospitalized in cardiac intensive care wards in the east of Guilan province in North of Iran. It also attempted to add the perspectives and

experiences of family members to the understanding of factors that induce tension for appropriate planning directed at removing or decreasing these tension-inducing components.

Researchers involved in this study were P. Pourghane, M. Rajab pour Nikfam and A. Ebadi. P. Pourghane, PhD. is an Assistant Professor in Department of Nursing in the Faculty of Nursing and Midwifery at Guilan University of Medical Sciences, Rasht, Iran. Her areas of research include education, cardiac rehabilitation and qualitative studies. M. Rajab pour Nikfam, Master is an instructor in Department of Nursing in the Faculty of Nursing and Midwifery at Guilan University of Medical Sciences, Rasht, Iran. Her areas of research include education, qualitative studies, Content analysis and Intensive Care. A. Ebadi, PhD. is an Associate Professor in Baqiyatallah University of Medical Sciences, Tehran, Iran. His areas of research include Qualitative studies, Instrument Development, Intensive Care, Nursing education and Nursing Management. All three researchers have teaching experience in the topic of Cardiac Care Units (CCU) and clinical teaching experience. Also, all three researchers have worked in a CCU ward as a Nurse in different years and faced the stress experienced by hospitalized patients' family members. P. Pourghane and M. Rajab pour Nikfam performed the data collection and were responsible for the study conception and design. P. Pourghane, M. Rajab pour Nikfam and A. Ebadi performed the data analysis. P. Pourghane was responsible for the drafting of the manuscript. A. Ebadi made critical revisions to the paper for important intellectual content.

Of the limitations of this study is a lack of the transferability of our findings due to its qualitative nature. However, the researchers tried to choose an appropriate number of participants and consider the maximum variation in sampling for enhancing the rigor of this study. Another limitation was the impatience and fatigue of family members at some times; when this occurred the researchers postponed the interview to a later time after coordination with family members. This study was conducted with a sample of hospitalized patients' family in Cardiac care units in the north of Iran; therefore, our findings may not transfer to other hospitalized patients' family members in other parts of Iran and other countries. Future studies are required to conduct similar studies with hospitalized patients' family in other areas as well as other wards of the hospital.

## Methods

### Study Design

The research methodology is determined by the main research question and the general objective of the research, which was to understand the perceived stressors of families of patients in cardiac care units. Thus, conventional qualitative content analysis was selected as the study methodology to gain an understanding into the experience of families of patients hospitalized in cardiac intensive care wards with regard to tension-inducing factors. Content quality analysis was used to discover and explain human feelings and meanings hidden in daily experiences (Polit & Beck, 2010).

### Participants

The study population was comprised of 28 family members of cardiac patients, including patients' children or spouse, and daughter-in-law, with an age range of 18 to 68 years old, who had been referred to hospitals in Guilan province located in the north of Iran, to pay a visit to their patients in in-patient care. To observe the ethical aspects of the study, permissions were obtained from the Research Deputy of Guilan University of Medical Sciences in Iran under the code IR.GUMS.REC. 417 dated 25<sup>th</sup> January 2016. The study population was

selected through purposive sampling and included all families of cardiac patients hospitalized in cardiac intensive care wards of east Guilan hospitals in a three month period. To observe maximal variation in sampling, a wide range of families with various characteristics regarding their gender and relationship (wife or husband), education, and financial condition were selected.

### **Data Gathering**

Individual semi-structured interviews were conducted and were held face-to-face in a sufficiently calm environment. The main questions of the interview posed to the participants were: "If possible, please talk about your experience of taking care of your family member when you're at his or her side as a patient" and "Please talk about your own experience of any concerning factors during your patient's hospitalization." The next questions followed as per the provided answers to these questions with a greater focus and for a better understanding of the issue. The interviews lasted between 35 and 55 minutes. Data was collected up to data saturation point, where the collected data was a duplicate of the previous data and no new information was acquired. Data collection and analysis were performed simultaneously.

### **Data Analysis**

Data analysis was conducted as per the steps recommended by Graneheim and Lundman (2004). First, to analyze the data, we transcribed and read the interviews several times to obtain an overall understanding of the study phenomenon. We considered the entire interview as the unit of analysis and words, sentences, and paragraphs as meaning units. Then, we abstracted meaning units based on the latent meanings behind them via a coding process and developed categories through the comparison of the codes in terms of similarities and differences. The comparison of the categories and reflection on the latent meaning of the data led to the development of some themes (Graneheim & Lundman, 2004).

The accuracy and strength of data were established through the following steps: data credibility was increased through long term participation and adequate interaction with the study participants, collection of accurate information, and obtaining participants' confirmation on the data. Data dependability was achieved and increased through the means of data collection and analysis as well as subject matter experts' review of the data. A detailed and rich description of the research was provided to assess whether the research can be applied in other areas for the purpose of research transferability. University faculty members' approval and opinion was sought to increase data confirmability.

### **Ethical Considerations**

To observe the ethical aspects of the study, permissions were obtained from the Research Deputy of Guilan University of Medical Sciences in Iran under the code IR.GUMS.REC. 417 dated 25<sup>th</sup> January 2016 and then, presented to the respective authorities for execution of the study. Prior to the commencement of interviews, the research objective, the reason for recording the interviews, confidentiality of their data, deletion of their data after extraction of results, their voluntary participation in the research, the possibility to opt out of the research, and possibility of having access to research results were explained to participants. Their written consent was obtained before the commencement of interviews.

## Results

Seven hundred thirty primary codes were extracted from the interviews with the participants in waiting rooms of hospitals. After several rounds of code review and summarization as per their similarity and pertinence, they were categorized in three main themes and seven subthemes, and then were named as per their nature. The study yielded three main themes and seven sub-themes including the three main themes: Heavy shadow of illness, Hesitation in the treatment, and Economic storm. The themes and subthemes are presented and discussed below.

Table 1: Overview of the Themes, Subthemes and codes Constructed Based factors inducing stress in the families of patients hospitalized in cardiac intensive care units

Main themes	Subthemes	Codes
<b>Heavy shadow of illness</b>	Fear of loneliness on the caring path	Fear of dependency Lack of sympathy with families Being involved in exhausting affairs
	Fear of disease	Fear of death Fear of surgeries Anxiety over heritability of disease Fear of repeated hospitalizations
	Poor personal knowledge	Inadequate literacy Lack of knowledge on the disease
<b>Hesitation in the treatment</b>	Doubting the efficiency of technology	Doubts about devices functioning correctly Doubts about new devices
	Ungential healthcare providers	Personnel's ungeniality Personnel's inadequate attention to patient Inadequate guidance provided by personnel Facing unanswered questions Negligible learning's from personnel Doubts about proper care being offered to patient
<b>Economic storm</b>	High cost of treatment	Personnel's ungeniality Personnel's inadequate attention to patient Inadequate guidance provided by personnel Facing unanswered questions Negligible learning's from personnel Doubts about proper care being offered to patient
	Potential economic problems	Modicum number of pensions offered by Emdad Committee Rental house Living in remote villages Lack of facilities at home

## Heavy Shadow of Illness

Participants of the current study went through a heavy shadow of illness. Patients' families talked about their fear of being alone on the path of caring for their patient, their fear of how the disease would go, and their poor personal knowledge of the disease and their patient's respective needs.

### *Fear of being alone on the path of caring*

Some of participants' experiences indicated fear and anxiety on the path of caring for their patient. Some of the patient's relatives expressed their fear of dependency on their children or relatives. "This disease has always concerned us about getting dependent on our children. They have enough personal issues on their plate," mentioned one of the participants. Some participants were worried about their family members being unsympathetic and unsupportive. "My brothers pay him a visit just occasionally. I and my spouse are both working and now our main concern is whom we should ask to take care of my dad when he gets discharged from the hospital," stated one of the participants. Another participant who was the patient's spouse said, "My spouse had a heart attack and she won't certainly be able to perform all her daily affairs by herself. I am also sick and am worried about how it is going to be without my children who are not living in this province."

Being involved in exhausting affairs and various diagnostic follow-ups for one's own relatives formed another part of participants' experience. "All my mom's affairs, visiting her every day, purchase of her medicine, and all her other affairs are on me. Unhappily my siblings believe that as I am younger and have more free time, then I am the one who should take care of all these affairs, and this issue is completely out of my hands," mentioned one of the participants.

### *Fear of disease*

Fear of death and surgeries, anxiety over inheritability of disease, and fear of repeated hospitalizations after discharge induce a fear of disease in the patients' family members who participated in this study. Some voiced their fear of losing the patient. As their patient's condition deteriorated, their concern about his or her death increased: "When we brought my husband to the hospital, he was unconscious, and I was worried about losing him as this was his 3<sup>rd</sup> heart stroke," stated one of the participants.

Some participants were also anxious about their patient requiring a heart surgery. A participant said: "My mom's doctor said she would most probably need surgery. I am so much worried about this issue as my mom is diabetic and of irregular blood pressure." Fear of inheriting the disease was another stress-inducing factor for patients' children. Another participant stated: "I know cardiac disease can be hereditary, and I am always worried about it. I have taken ECG, Echo and stress tests. Because my dad, without any symptoms, had a heart stroke at the age of 41 years, and thank God they saved him."

Some participants were worried about their patient's re-hospitalization. Non-observance of physician's advice by the patient was the source of worry for disease relapse. "My husband does not follow his diet; he also smokes. Considering I am suffering from knee arthritis, I am worried about how I should bring him back to the hospital after his discharge," mentioned one of the participants.

### *Poor personal knowledge*

Poor knowledge of the required care as well as not knowing the disease trend induced stress in the majority of participants. Some talked about their poor medical knowledge especially on cardiac disease and required care services for their own patient. "I am a high-school teacher; but I do not have much information on how to take care of a patient with cardiac disease. This worries me a lot for the time my patient is discharged," stated one of the participants. The poor knowledge was sometimes rooted in participants' low level of literacy. "I am not literate enough. Have only finished secondary school and whatever I know I have learned from my late mother. And as I live with my spouse, I am too much worried about post-discharge care," another participant stated about the poor knowledge.

### **Hesitation in the Treatment**

The stressors identified in participants were caused by sometimes malfunctioning of some medical devices in the ward as well as poor communication confrontations with the healthcare professionals.

### *Doubt about the efficacy of technology*

Some participants were dubious about correct functioning and efficiency of some of the medical devices. Substitution of malfunctioning devices had induced some concern for patients' relatives. "I am dubious about some of these devices functioning correctly or not. Because I saw they changed a device several times for my mother," mentioned one of the participants. Some participants complained about the devices being possibly old and voiced their concern about their probable inappropriateness. Another participant stated: "What is in fact worrying me, is whether the devices of this center are as new as those in Tehran so everything goes well with my mother's diagnosis and treatment."

### *Ungentil therapists*

Some of participants linked their stress to different aspects of their relationship with the treatment team such as personnel's inadequate level of sympathy, personnel's inadequate attention to the patient, inadequate guidance provided by the personnel, families facing unanswered questions, negligible learnings from the personnel, and doubts about proper care being offered to the patient. The participants seemed to expect a closer relationship mingled with adequate sympathy and guidance from the treatment team.

Some deemed personnel's sympathy with them and their patient as inadequate, while adequate attention and sympathy was expected from them. "When I brought my mom to the hospital by myself, I was only screaming for help. The personnel shouted at me for rushing it. Well, I was shocked and they should have offered me some consolation and sympathy," stated one of the participants. Some complained about different manners of communication adopted by the personnel and not receiving a proper and correct response from the personnel as another tension-inducing source. Another participant stated: "Some personnel communicate superbly and answer all questions one asks, but some others are never in the mood for any questions and only say that we will be told what to do when the patient is discharged."

The existing regulations pose some limitations on visiting the patients in intensive care wards. In addition, the shortage of personnel causes great concern for the participants with regard to the proper and actual level of aid and support such patients require and receive. "My mom likes to have me by herself all the time. But it is an intensive care ward and I cannot stay

in; because they say as the number of personnel at the night shift is few, it would make it quite difficult to respond to some of the patients,” mentioned one of the participants.

### **Economic Storm**

The high cost of treatment as well as potential financial problems formed some parts of participants’ stress-inducing experience.

#### *The high cost of treatment*

The high cost of medicine, high cost of surgeries, and high cost of hospitalization constituted parts of participants’ tension-inducing experience. Some participants complained about the expensive medicines they had to buy and which are not covered by insurance. “The majority of our medicine is not covered by insurance. This impacts our life to a large extent leading to great financial concerns,” stated one of the participants. Some other participants’ concerns revolved around the high cost of hospitalization or other modes of therapy such as surgery. “If a member of one’s family requires repeated hospitalizations and surgeries, then the economy of the family is entirely impacted and disrupted. The surgeries are costly in themselves which entail huge expenses for the purchase of medicine,” mentioned one of the participants.

#### *Potential financial problems*

Some participants complained about several potential financial problems associated with the disease which intensifies the tension of these periods. Modest number of pensions offered by Aid Committee, not owning one’s personal house and having to live in rental houses, living in remote villages and lack of facilities at home were among such potential problems.

Some families were worried about the small number of pensions they were receiving from Emdad committee. “We are covered by Aid Committee. Now that we are in such conditions, we are expecting the committee to support us more so we can resolve our problems,” mentioned one of the participants.

The monthly rents some of the participants had to pay, in addition to the treatment costs, intensified the tensions in some participants. “We have so far been living in rental houses and have to pay rents every month. Due to my husband’s illness, which has cost us a lot since its start, I haven’t been able to pay the last month’s rent which embarrasses me in front of my landlord,” stated one of the participants. Some were living in remote villages without any facilities. As their patient’s condition deteriorated, their concern grew because of having no immediate and in-time access to clinics. Another participant stated: “We live in a village which is one and a half hour away from the hospital. There are no facilities in our village as well. I am always worried how I can take my mom to the hospital immediately when she feels bad again.”

## **Discussion**

The present study attempts, as its objective, to describe the factors inducing stress in the families of patients hospitalized in special cardiac wards in the east of Guilan province in Iran. According to participants’ statements, stressors such as fear of loneliness on the caring path, fear of disease, and poor personal knowledge of the disease were associated with a *Heavy shadow of illness*; doubting the efficiency of technology, ungenial healthcare providers were

associated with *Hesitation in the treatment*; high cost of treatment and potential economic problems were considered as an *Economic storm*.

### **Heavy Shadow of Illness**

#### *Fear of loneliness on the caring path*

As per the findings obtained from the interviews, fear of loneliness on the caring path results from fear of dependency, family members' non-accompaniment, and involvement in exhausting tasks. A patient's relative is considered as one of the treatment team members who plays a significant role in various aspects such as carrying out the patient's personal affairs, helping the patient with taking his/her medicine, and providing emotional and mental support. A patient's family member is in fact both a provider and a receiver of support who has certain needs such as information, emotional support and tools (Mohamadi & Ebrahimi, 2014). Imposing responsibilities beyond one's capacity leads to ill effects such as an individual's inefficiency and failure (Sharp, 1990) which ultimately ends in a sense of loneliness and being overwhelmed by the grave responsibility of taking care of the patient (Litinen-Junkkari, Marilainen, & Sinkkonen, 2001). In this regard, as reported by Shyu (2000), the unofficial caretakers at hospitals feel left alone with the responsibility of taking care of the patient, and an over-involvement with caring responsibilities leads to patients' own dissatisfaction with the care which can result from a lack of support from others. Also, Pashae, Taleghani, Tavakol, & Rezae, (2011) studied the caring-related challenges faced, caregiver's loneliness and the fact he/she has to bear this grave and stressful responsibility, as well as the fact the foregoing issues impact the caregiver's physical and mental health (Pashae et al., 2011). Thus, paying attention to family members is one of the principles of caring for patients because mostly family members are in charge of supporting the patients (Roberti, & Fitzpatrick, 2010).

#### *Fear of disease*

Fear of death and surgeries, anxiety over inheritability of disease, and fear of recurring hospitalizations after discharge are among the causes of fear in patients' families, according to these study participants. The nature of the disease also affects the level of family members' anxiety. Knowledge over different aspects of the disease, treatment and caring cannot by itself help a patient's family to adapt with the status quo. Various issues such as the nature of the disease or its severity, which can either be mild or terminal, the duration of the disease which can be short or chronic, the impact of the disease on the family, the effect of the disease on family's future performance as well as the financial damage incurred by the disease affects families' level of adaptability with the disease (Berman, Synder, Kozier, & Erb, 2008). Also, surgeries cause certain levels of anxiety, fear and concern for the patient and his family, especially in the case of heart surgeries as the heart is commonly believed to be the main organ of body determining an individual's life and death (Imanipour, Heidari, Seyedfatemi, & Haghani, 2012). Also, In this regard, Yan (2010) showed in their study that when family members are faced with the fear of their favorite child's death, their stress and anxiety increases dramatically. Navidian et al. (2014) also showed that hospitalization of a family member, either in intensive or regular wards, heightens the psychological reaction levels in other family members. This is of greater importance in Iranian family-centered culture where hospitalization suggests damage, heightened risk of death, losing and unpredictable issues for the health of a family member (Navidian et al., 2014).

### *Poor personal knowledge*

In the present study, the inadequate level of literacy as well as lack of knowledge about the disease resulted in participants' poor personal knowledge. Receiving training and adequate information on different aspects of disease, treatment plan and related cares is one of the important concerns and requirements of families. Providing information to family members results in an increase in their awareness on whatever is occurring to them, which ultimately prepares them for supporting their patient (Astedt-Kurki, Lehti, Paunonen, & Paavilainen, 1999).

Even though the interaction between treatment team and patients' family members at hospital is one of the integral components of caring, their interaction has been observed to be at a minimum level (Laitinen, 1992). As reported by Gundo (2010), a poor educational status, admission of patient into intensive care wards without prior appointment, and incomplete information on patient's condition cause much mental reaction in patient's family members.

Also, it has been noted by Navidian et al. (2014) that individuals of lower educational level are exposed to greater levels of stress, anxiety and depression. In the study conducted by Rabie-Siahkali et al. (2011), it was also indicated that illiterate families and those residing in villages experience significantly greater levels of anxiety than other families, and it was also shown that individuals with academic education have a greater understanding of patient's condition which facilitates individual's adaptation and reduces their anxiety. Furthermore, in the studies conducted by Pashae et al. (2011), Abdollahpour, Nejat, Norouzian, Majdzadeh, Golestan, and Farid Hosseini (2015), and Cameron, Franche, Scheung, and Stewart (2002), a need for information was among the important requirements of taking care of family members which was not fully observed by healthcare professionals. In contrast to the results obtained by the present study, Kochaki-nejad, Mohajjel-Aghdam, Hassnkhani, and Sanaat, (2015) and Panganiban-Corales & Medina Jr. (2011) found no correlations between patients' educational level and the tension in them. The difference in the study population, which in the current study included a majority of care-givers being of non-academic education, may account for why the results obtained by the present study varied from those of other studies.

### **Hesitation in the Treatment**

#### *Doubts about the efficacy of technology*

Doubts about the efficiency of devices and utilization of new devices were among the factors inducing doubts about the efficiency of technology in participants. The intensive care ward is considered an environment full of tension for patients and their relatives; the complicated technology and equipment of this ward is one of the factors increasing the mental and psychological stress for families (Dugas, 2006; Stewart & Choate, 2002; Sole, Klein, & Moseley, 2005). Conforming to the results of the present study, Sole et al. (2005) also maintained that utilization of life-supporting devices and monitoring devices in intensive care wards can be one of the anxiety-inducing factors. In fact, most family members of the patients hospitalized in intensive care ward do not understand the technical and medical monitoring equipment very well (Gundo, 2010) and the sight of the pipes and wires connected to the patient is considered as one of the environmental factors affecting families' anxiety (Rabie-Siahkali et al., 2011).

### *Ungentil therapists*

Personnel's inadequate level of sympathy, personnel's inadequate attention to patients, inadequate guidance provided by the personnel, families facing unanswered questions, negligible learnings from the personnel, and doubts about proper care being offered to patients were considered as factors indicating healthcare professionals' ungentility.

As part of their duty, nurses are supposed to support families and help them better adapt with their crisis; such a support is only possible through keeping contact with the family and updating them on the clinical procession and the patient's condition (Berman et al., 2008). Even though nurses are in a good position to satisfy families' needs, they spend a negligible amount of time on this issue (Holden, Harrison, & Johnson, 2002). Unawareness about patient's condition, being faced with many unanswered questions, and uncertainty about the future may place the families in a crisis (Gundo, 2010; Titler, 1992).

Further to the present study, Abedi et al. (2006) pointed out families' needs of training information, emotional support, and contribution to decision makings during the caring process. Consistent with this finding, Maxwell, Strunkel, and Saylor (2007) also mentioned that talking with doctors and nurses on a daily basis, acquiring updates on their patients' status, acquiring information on the treatment, reaching certainty about the best measures taken for their patient, being encouraged by healthcare professionals, knowing the facts about their patient's condition, trusting the hospital personnel, receiving honest answers to their questions, talking about their feelings, and reaching certainty about the correct execution of procedures for their patient are among needs of family members whose patient is hospitalized in an intensive care ward. In this regard, Bailey, Sabbagh, Loiselle, Boileau, and McVey (2010) also counted five main groups of family members' needs: need for information, need for certainty, need for sympathy, need for convenience, and need for psychological and mental support.

### **Economic Storm**

#### *The high cost of treatment*

The high cost of medicine, high cost of surgeries, and high cost of hospitalization constitute the high cost of treatment. Families always worry about costs associated with hospitals, medicine, medical equipment, diagnostic costs, and healthcare services; thus, disease in families is always considered as a crisis which can intensify the anxiety in a patient's family (Dugas, 2006). Also, Hartshon, Sole, and Lamborn (2001) held that one of the tension-inducing factors affecting families' anxiety is their financial problems. In this regard, in the study conducted by Moshkani and Kouhdani (2005), financial problems and those associated with medicine were counted among the major tension-inducing factors in a patient's family. Also, a significant relationship was observed by Rabie-Siahkali et al. (2011) between poor financial conditions for satisfying the medicinal needs (medicine and equipment) and anxiety in families.

#### *Potential financial problems*

According to the results obtained from interviews, the modest amount of pension received from Emdad Committee, not owning one's own personal house and having to live in rental houses, living in remote villages, and lack of facilities at home constituted the potential financial problems faced by patients' families. Consistent with the results of this research, the study conducted by Hasnzadeh-Salmasi, Koushavar, Hasanzadeh-Salmasi, and Afrasiabi Rad, (2002) counted poor financial conditions for covering hospitalization costs as well as the families living far from the hospital were considered as tension-inducing factors. Financial

pressure was regarded as one of the most significant stressors by Heidari-Pahlavian, Gharakhani, and Mahjoub (2011). However, in contrast to the results obtained by the present study, Mohamadi and Ebrahimi (2014) indicated that, in patients' relatives' view, offering information on societies and committees offering emotional and financial support to patients received the lowest score of hospital performance. The difference may be resulting from the difference in the methodology of the study (questionnaire), a larger volume of study population (200 individuals) and the difference in the hospital.

According to the results obtained by the present study, which aimed to understand the factors inducing stress in the families of patients hospitalized in cardiac intensive care units in the east of Guilan province in Iran, families' statements revealed three main themes: stressors associated with disease, stressors associated with treatment, and economic stressors.

Thus, stressors associated with disease in patients' family members can be reduced by offering adequate information and training on the disease as well as healthcare professionals' sympathy on the caring path. Also, genial relationships, timely feedback, sympathizing with families, ensuring them about utilization of new devices and their accurate functioning can reduce the tensions associated with treatment to a large extent. Those patients facing high medical costs and those of poor resources inadequate for covering their medical expenses, as well as those with potential financial problems can be introduced and referred to social services and charity organization for alleviation of their financial concerns.

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The researcher of the present study declares that no conflict of interest exists in the present study.

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