

# The Perception of Trauma Patients from Social Support in Adjustment to Lower-Limb Amputation: A Qualitative Study

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## ABSTRACT

**Introduction:** The effect of amputation on an individual's psychological condition as well as family and social relationships is undeniable because physical disability not just affects the psycho-social adjustment, but also the mental health. When compared to normal people, such people are mostly experiencing social isolation. On the other hand, social support is known as the most powerful force to cope with stressful situations and it allows patients to withstand problems. The present study aims to explain understanding the trauma of patients and the experience of support sources during the process of adaptation to a lower limb amputation.

**Materials and Methods:** The present study was conducted using qualitative content analysis. Participants included 20 patients with lower limb amputation due to trauma. Sampling was purposive initially and continued until data saturation. Unstructured interviews were used as the main method of data collection. Collected data were analyzed using qualitative content analysis and constant comparison methods.

**Results:** The main theme extracted from the data was support sources. The classes include "supportive family", "gaining friends' support", "gaining morale from peers", and "assurance and satisfaction with the workplace."

**Conclusion:** Given the high number of physical, mental and social problems in trauma patients, identifying and strengthening support sources can be effective in their adaptation with the disease and improvement of the quality of their life.

**Key words:** Adjustment, Amputation, Qualitative study, Social support

## INTRODUCTION

Today, trauma is considered as a major healthcare problem in every society with any health, social and economic status. Trauma accounts for about 12 percent of all causes of death worldwide. In addition to being cause of death of millions of people, it causes temporary or permanent disabilities for millions of others. This affects not only the

individual, but also the family, society and other involved systems insofar as this has been one of the priorities identified by the World Health Organization.<sup>[1-4]</sup> Although loss of life is considered as a main indicator for expressing the significance of an accident from the perspective of health and society, it is sometimes ignored that for every life lost due to an accident, a large number of injuries including amputation occurs at the same time, which leads to hospitalization, receiving medical and pre-hospital services, and utilizing equipment and human resources for treatment and rehabilitation of the injured people. Some causes of amputation include traumas, infections, diabetes, cardiovascular diseases, cancers and other diseases. Trauma is the leading cause of amputation worldwide. However,

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the causes of amputation due to trauma vary from country to country, in countries with a recent war in their history; about 80 percent of amputations are due to war, which differs in different countries. For example, in Cambodia, 94.5% of amputations are caused by the war related traumas, 4.5% by the other traumas and 1% by diseases. These figures are respectively 65%, 25% and 10% in Zimbabwe, 3%, 32% and 65% in US and 2%, 30% and 68% in Denmark.<sup>[5]</sup> Most of people under 50 with amputations caused by trauma and injuries associated with car accidents, industrial accidents or war live in the developing countries.<sup>[6]</sup> The most frequent cause of amputation in veterans is traumatic factors (direct contact with mines and fragmentations). The next main common cause is secondary infections. Amputation of the lower limbs, more common in men than women, includes about 80-87% of all cases of amputation and may occur in one or both lower extremities.<sup>[7,8]</sup> Lower limb amputation occurs frequently in accident and war injuries and its most common form is below-knee amputation.<sup>[5]</sup> The level of lower limb amputation may be from finger tip to hip joint or even removal of a part of pelvic bone.<sup>[9]</sup> The impact of amputation on an individual's psychological condition as well as family and social relationships is undeniable because physical disability affects not only the psycho-social adjustment, but also the mental health. When compared to normal people, such people mostly experience social isolation.<sup>[10,11]</sup> Getting back into life after amputation comes with many problems. Due to failure to comply with the new condition, these people may suffer from psycho-social difficulties such as depression, sense of hopelessness, low self-esteem, boredom, anxiety, frustration, feeling guilty, and fear of the family's future, which sometimes lead them to commit suicide. Furthermore, they involve other problems such as abnormal behaviors (addiction to drugs or alcohol) and poor social performance.<sup>[8,12]</sup> The economic, social, personal, familial, and environmental problems are other problems faced by the people with amputations, making their life more difficult.<sup>[10,13]</sup> Therefore, patients should employ strategies to manage their disease. However, research has shown that social support has a great role in adaptation and coping with diseases, such as amputation. Support refers to protecting and establishing a social interaction that starts with communication and after a while, it leads to an empathic relationship and ultimately an immune system for the patient.<sup>[14]</sup> In fact, support is a vital and multi-dimensional need and patients should always enjoy from it.<sup>[15]</sup> Social support can be provided in the form of psychological-emotional, information, tangible and sociable support. But it is important that the patient understands the presented support. Understanding the support is more important than receiving it. In other words, it seems that the understanding and attitude of patients towards

the received support is more important than the level of presented support.<sup>[16]</sup> In fact, living with a disease means to overcome feelings and tags of low value that are the usual outcome of a chronic disease; and those who have more social support, pass the transition phase easier than others.<sup>[17]</sup> Therefore, the role of support in this winding path is clear, because understanding social support can prevent the occurrence of adverse physiological adverse effects in patients, increase the level of self-care, positively influence their physical, mental, and social conditions and clearly increase their performance.<sup>[18]</sup> Family members, relatives, friends, doctors, other health-care workers and also support associations can be such a support source for the patients.<sup>[19]</sup> Although, the importance of friends and family, especially peers in adaptation with chronic diseases has been mentioned in several studies,<sup>[20-22]</sup> one of the aspects of social support is the informal family support. The individual's self-care ability and behavior are affected by underlying causes like family. Undoubtedly, family (spouse, children and parents) is the first-line support for the patient to comply with the disorder occurred in his/her life. Family members, especially spouse are the first individuals providing care to the patient with chronic disease, meeting the needs for emotional, ethical, and knowledge support, the needs for positive and intimate feedback, which lead to enhanced motivation and adaptation.<sup>[20]</sup> Although, the spouse of a disabled person is one of the closest relatives, who has the largest and the most extensive (emotional and cognitive, and verbal and non-verbal) relation with that individual, he/she deal with numerous afflictions, as shown in different studies.<sup>[20-22]</sup> Considering the considerable number of stressors in the life of amputees and long-term physical problems and limitations, which suggests the possibility of reduced quality of life more than before, cooperation with other groups and individuals seems to be necessary. If amputees are encouraged to use positive-coping strategies, they will express their feelings more easily (expressing feelings is a way of dealing with amputation more appropriately), which contributes to their adaptation process.<sup>[23]</sup> Given that social support and cohesion are currently considered as the important factors in adapting and coping with acute and chronic diseases and it is important that patients understand the protection provided, the present study aims to explain the understanding of trauma patients and experience of support sources during the process of adaptation with a lower limb amputation.

## MATERIALS AND METHODS

This study is part of a comprehensive study entitled "Process of Adjustment to Lower Limb Amputation in Traumatic

Patients” using qualitative content analysis. In this study, using purposive sampling, 20 participants from among the amputees continuously referring to the Foundation of Veterans and the State Welfare Organization of Ardebil and Tabriz for follow-up treatment was selected and interviews were conducted until the point of data saturation. In a qualitative research, sampling is often started purposefully aiming to select people who have experienced the phenomenon in question, and are able to offer their experiences; *i.e.* those rich in information to participate actively and help the researcher to understand their lives and their social interactions in a better way. This process continues by theoretical sampling, in which selection of each new participant depends on previous samples or participants and the data obtained from them. Selection of the next subjects depends on who were selected first and what information has been obtained from them.<sup>[24]</sup> In the course of the study, purposive sampling is gradually replaced with theoretical sampling. At the start of sampling, the researcher was looking for people who, as the key knowers, were rich sources of information about social support for coping with lower limb amputation; thus, could help to have a better understanding about the phenomenon of coping with amputation. Therefore, the first selection of the participants was performed with the help and consult of experts in the Foundation of Martyrs and Veterans Affairs and the Department of Social Welfare, which were in close contact with the participants from the beginning of affection and during amputation and hence knew them well. Sampling was performed at first through an objective-based method and after formation of initial concepts and their characteristics and spectrum, the next objectives were selected via theoretical sampling to further complete the concepts and the obtained classes, and further discover the relations between classes.

From among the 20 participants in this study, 85% and 95% were male and married, respectively. The participants’ age ranged from 25 to 57 (with an average age of  $41.7 \pm 7.9$ ) and the history of lower limb amputation ranged from 2 to 31 years (with an average of  $20.4 \pm 10.5$ ). Participants amounting to 43.8%, were amputated following an accident and 56.2% due to war. Forty percent of participants were under diploma, 45% had an associate or bachelor degree, and 15% had a master or doctorate degree. Forty-five percent were governmental employees, 30% self-employed, and 25% unemployed or housewives. In addition, the participants in this study had different types of trauma (war, accidents and, injuries, burns, etc.).

Participants were selected with the highest diversity (in terms of duration of amputation, age, sex, marital status, education, occupation, etc.). The goal of the maximum

variation sampling is to obtain rich, extensive, and deep data covering a wide range of social behaviors (including social support). Confirming this, Polit *et al.* (1993) stated that in maximum variation sampling, the data obtained are more extensive and diverse. Therefore, the nature of the phenomenon is investigated more appropriately.<sup>[25]</sup>

The main method used for data collection was in-depth unstructured interviewing with open-ended questions. This type of interview is appropriate for qualitative research because of its flexibility and depth.<sup>[26]</sup> Interview with open-ended questions allowed the participants to fully explain their experiences about the phenomenon under study. All interviews were conducted by the main researcher and started off with a general question: “Tell me about your amputation”. The following questions were asked based on the information provided by the participant and were focused on clarifying the main question that was the process of adjustment to amputation of lower limbs. The length of personal interviews varied between 30 to 120 minutes and was 72 minutes, on average. All interviews were recorded, and were immediately analyzed word-by-word using MAXQD10 software. Given that in qualitative research the researcher is needed to be immersed in the information<sup>[27]</sup> researcher listened to interviews and reviewed the typed texts several times. The alternative way of data collection in this study was observation, which was performed to study the interactions and understand the meaning and practices of the participants during the process of coping with amputation. Observation of the behaviors and their documentation help perceiving the difference between what people say and what they really do.<sup>[28]</sup> Therefore, the researcher observed interactions and relationships of the participants with family members, peers, and colleagues before and after the interview at workspace, home, and the rehabilitation clinic; then prepared field notes from himself. Field notes are pieces of writings by the researcher from observations, which were used to document the observations and analyze the data. During documentation, the researcher wrote on a paper whatever that he heard, saw, felt, experienced, or thought.<sup>[29]</sup> In order to observe the ethics, the researcher as an observer participant, monitored and perceived the subjects overtly and with prior notice. The researcher wrote constantly a memo to collect rich data. The memo allowed the researcher to write his opinions and views about the data; it served also to document the researcher’s evolving ideas about codes and their interactions. Memo writing is documentation of the researcher’s thinking process.<sup>[30]</sup> The interviews went on for about 11 months.

In this research, data was collected and analyzed simultaneously, using the qualitative content analysis and

constant comparison techniques. Qualitative content analysis is a research method for the subjective interpretation of the content of text data.<sup>[31]</sup> In this method, through the systematic classification process, coding categories can be directly and inductively extracted from the raw data.<sup>[32,33]</sup> Content analysis goes beyond merely extracting the objective content from text data, and thereby, key concepts and hidden patterns can be extracted from the content of data collected from the participants. In qualitative content analysis process, data collection and analysis, proceed simultaneously.<sup>[33]</sup> In this method, in order to collect the new data for answering research questions, the researcher goes back and forth between data collection and analysis.<sup>[31]</sup> In other words, the systematic analysis process was interactive and rotational, meaning that while analyzing the data, the researcher frequently referred to the previous data and the topics which they included, and compared the new data with the old ones.

The units of analysis are also selected from the interview transcript. These units are the analyzable parts of the text data, which help the researcher achieve the research goals. The initial codes will be extracted from the meaning units, which are the important and reliable units of analysis. In this study, the content of each interview was analyzed immediately and the next interview was conducted based on the extracted concepts. During data analysis, the emphasis in data was on conceptualization, which proceeded through interaction between the researcher and the data, and also through constant comparisons. Constant comparisons led the researcher to consider more variation in the data. He tried to compare events, incidents, and features of a class with those of other classes and to pay attention to the main differences and similarities.

The initial codes may contain the exact content of interview or be an abstraction derived from the content. Then, based on their similarities and differences,<sup>[34]</sup> the initial codes are reduced into sub-categories, which in turn are reduced into abstract categories and key concepts.<sup>[35]</sup> Data analysis was performed through a five-step content analysis as recommended by Granheimand Lundman.<sup>[34]</sup> In the first step, the audio-taped interviews were immediately transcribed verbatim and used as the main data of research. In the second step, after listening carefully to the tape-recorded interviews several times and reading the transcribed material, the text was divided into meaning units. In the third step, the meaning units were abstracted and labeled with codes. According to the experiences of the participants, the visible and hidden meanings were identified as sentences or paragraphs, and then they were summarized and labeled with codes. In the fourth step,

based on the similarities, differences and proportions, the codes implying the same theme were classified in the same category. Then, the categories, sub-categories and key codes were formed. Using the group members' comments and suggestions, the vague and obscure points requiring more attention were discovered and revised in the next interview. Concepts were specified based on the inner content of the text, which was reviewed and revised according to all data.

During the study, some methods were used to ensure the data accuracy and stability. Long-term relationship with amputees increases trust and makes them more willing to share the truth, which in turn increases generation of real and authentic data. Member checking or respondent validation was used to verify data accuracy and to ensure data validity. Sharing with participants some parts of the interview and his interpretations of their words, the researcher discussed his own interpretation and the meaning of participants' words with them to achieve identical ideas and concepts. Member checking, reading the transcribed interviews, revision of initial codes, categories and concepts as well as receiving the participants' feedback were all the techniques used for data validation. Data credibility was confirmed by peer review and the interview transcripts, cods and categories were extracted. Additionally, the results were examined by three faculty members and there was compatibility between the extracted data. The researcher shared the findings with some amputees who were not participated in the study and data compatibility was confirmed by them as well. Interviewing with different participants, using direct quoting and providing examples and rich data representation made the data transferability and fittingness possible. Data dependability was provided by immediate transcription of interview and re-examination of all data using the external checking. The accuracy of the data collection and analysis process according to the methodology principles, was approved by professors and advisors, while it was reviewed as well in the meetings held every six-month, with experts and skilled people within the field of qualitative research; the ambiguities or drawbacks were discussed and analyzed, and consensus was finally achieved.

This study is a part of a PhD dissertation in nursing from Tabriz University of Medical Sciences, which was approved by the Ethics Committee of that university. Prior to the study, the approval of relevant authorities was obtained. Firstly, the participants were fully informed about the purpose of research and method of interview and were ensured about the confidentiality of information. They were told about their right to withdraw from the study and their informed consent was obtained. The date and time

of interview were set based on the participant's choice, so as it did not interfere with his/her daily schedule.

## RESULTS

After extracting initial codes from interviews, codes were reviewed and summarized several times and were classified based on the similarities and congruence. Then, by further reviewing and comparing the levels, their inner meaning was identified as initial themes. The initial themes were conceptually and abstractly named based on their nature. Thus, these themes showed the nature and dimensions of the patient's understanding of support sources. These themes include: 1-supportive family, 2-gaining the friends' support, 3-gaining morale from peers, and 4-assurance and satisfaction with the workplace.

### Supportive family

Among the mentioned support sources, the participants prominently stated the importance of family support in the interviews. They feel they are respected and loved by others, they are valuable components and they belong to a social network of mutual obligations and relationships. The first category of these patients' family includes parents, especially for single people, and spouse for married people. They help the disabled person in various ways such as helping them in doing daily activities, joining them when faced with problems, giving them morale, keeping them entertained, especially in dealing with anxiety, presenting financial support, giving hope, having mutual understanding in their lows and ups of life. About confabulating and creating a quiet and intimate environment with his/her mother to gain peace of mind, a participant says:

*"Whenever I need to relax mentally, I would say it to my mom and bug her to give me peace of mind so that I can easily handle problems even when I was humiliated. My mom has helped me so much. She supported me until I was married."* (P14)

A participant was faced with the divorce crisis. She is fully satisfied with the support of his brothers, and considers them as a protection shield against external damages, especially from her husband:

*"It was hard to cope with these crises (divorce). You know the only people who really supported me in the divorce problem were my brothers. They were really supportive and I was frightened that they may not even allow me come back home and that they may disagree with divorce. I am grateful to them for this support. They really protected me. They did not allow my husband to hurt me at all."* (P9)

One of the most fundamental concerns of mutilated people is to grapple with financial problems. On the one hand, medical equipment is costly and on the other hand, they are unable or have limitations to do their affairs and find suitable jobs due to defects caused by amputation. So, they have fundamental problems and concerns in this area. Most participants expressed that their families did not skimp in financial difficulties and assist them as much as they could.

*"Until my older sister was alive, I had no financial problems. She would come to my home, looking in my fridge. If it was empty, without chicken and meat, she would say my brother to fill my fridge."* (P15)

A participant who received financial support, in addition to mental and emotional support from her/his families, says:

*"After the accident, my family was bothered too much since I was a single child. My dad had bought a house after 25 years. He sold it at that time (2008) for me. Our home was demanded at a low price. He sold it for half the price and spent it for me. In addition to financial help, they gave me morale. I felt like I can't walk. My mother said: 'do not worry. We will somehow buy an artificial foot for you. We will even hold the wedding ceremony for you. You will dance in your wedding.' They lived up to their words."* (P4)

However, one of the most important support elements is the prominent role of spouse emphasized by many participants. Their spouses were the most important supporter and a close friend in dealing with great odds and difficulties arising from amputation. They always felt their spouses helped in tackling the problems. Their spouses were sympathetic and tireless friends in all fields and in different complicated situations. Their understanding and dedication were the main tools to overcome the problems and deficiencies caused by amputation. Their spouses often increased their confidence, comfort and encouragement in these areas.

*"One of the effective factors in coping with amputation is my spouse. The problem is that you marry a person without money and house. We initially were tenants for 4-5 years. We lived in misery. We had no pocket money. I would pay my salary for home rent. I would go to the terminal at night to transport passengers so that nobody can know me. However, he/she did not tease at all."* (P5)

Another participant stated that his wife has hidden financial problems from her family. In addition, she has retained her and her family's self-esteem and independence.

*"Thank God I have a great wife. She never told her family my problems. Once a week, she would go to his father's home without jacket*

*in the winter blizzard. She would say it does not matter to me. But she was lying. Often her family would take her home with their car; otherwise, she would hug the baby, walking 7-8 km to get home. But she never broke her pride and did not accept the second hand and old clothes of others even as gifts. We were completely venerable. Those a few years of financial crisis passed away with honor and pride.” (P2)*

As noted above, although most people believed that the family, especially spouse, is the most important support for disabled individuals in dealing with their daily problems, few of the participants stated that their family did not help them in problems and even in some cases they were disregarded by both the family and spouse. However, this situation was not prevailing in the life of the participants. For example, a participant says about his brother's indifference and lack of his support for moving the store items, which incurred costs, and he was even ridiculed by his brother:

*“Today, I wanted to move my store items to my home. I told my brother to help me. He said I can't (in mocking mode). I had to spend money to move my items while my brother was over there!” (P18)*

A divorced participant introduced her husband as a hindrance for her scientific progress and higher education.

*“Even when I was working in his office, I registered for participation in the Law exam at Payam-e- Noor University. Unfortunately, at the time of the entrance exam, he took me to a trip. I found out later that he did not want me to continue my education.” (P9)*

### Gaining friends' support

The second set of support sources is close and intimate friends. Obviously, life without relationships with others is almost impossible. Close relationship between two people leads to relaxation of the parties, support for each other in case of need and the sense of security and belonging. By telling good memories, assuming amputation simple, advising in everyday life such as job selection, helping and showing empathy in activities and understanding their situation, close friends improve their morale and positive outlook on life.

*“My friends sometimes supported me. For example, they advised me how to do a certain thing or in some cases they comforted me in difficult times.” (P7)*

*“I had a friend called. He advised me so much. He was a teacher for me, a great teacher who told me to forget. He taught me to forget some things.”(P12)*

Despite the emphasis of most participants on favorable support of friends, one of the participants believed that

after mutilation, his friends abandoned him and did not have good feeling for him.

*“I am living in this community. Because of my disability, I lost my best friends. My best friend told that he will no longer be with me.” (P12)*

### Gaining morale from peers

Another set of effective factors in dealing with their situation at this stage is to gain morale from peers. With peers, we mean a group with lower limb amputation or other amputations. All participants gave a positive evaluation of this group and felt that the problems of these people are similar to theirs, and they easily understand their problems in everyday life. Observing similar defects in these individuals becomes an effective aid in adaptation with the current state.

*“Families must gather together, guys must be together, because our situation is somewhat analogous. We're more comfortable with each other. We kid with each other more easily. We are very comfortable with each other in problems.” (P13)*

Sometimes, the peer group and similar patients caused the peace of mind for families, in addition to the individual.

*“I was put on the wheelchair to go down to see my mother. At that moment, of God's grace, I saw another veteran, passing before me. My mother cried bitterly and said why it happened to you. Suddenly I touched her hand and said to her 'I am not the only one on the wheelchair. Look at this veteran. He has lost his both feet.' That scene really made us relaxed.” (P8)*

### Assurance and satisfaction with the workplace

The last group of support sources is workplace. Most participants expressed that authorities understand their situation and pave the ground to provide their financial and emotional support.

*“I was given a corporate house by the company. The General Manager instructed to give me a villa house because it has no stairs. He explicitly told that my house must have a yard so that I can use my car easier. He understood my conditions. Moreover, he instructed the deputy to give me a comfortable chair they recently bought for the office.” (P13)*

They have even benefited from the collaborative colleagues. A participant says about the advices and guidance of his colleagues on the importance and encouragement to early marriage:

*“My colleagues in the company really guided me to marry due to my situation. They said that it must no longer be delayed; you must marry*

*and have a child so that you can solve part of your problems and also your child and wife can provide a special help for you tomorrow.” (P3)*

However, one participant grumbled about the lack of understanding and attention of his boss. He stated that his organization did not follow the rules and justice in giving him his rights and this is the reason of his early retirement.

*“Unfortunately, up to now there is no support from my boss. Most of these are slogans and there is no action. Actually, I struggled with my boss. I was in Hospital. They were recording 180 hours of overtime per month for themselves. My amputation was 45% legally; I could come in the workplace with 1.5 hours of delay in the morning. I said to my boss that I come in the morning on time, and instead, considered it overtime for me. He called me one morning and said that, from tomorrow, you can either come late in the morning or leave early at the afternoon. We can't record 60 hours of overtime per month for you. So, I had to be retire early.” (P7)*

## DISCUSSION

Support (protection) is the most decisive determinant of health<sup>[36]</sup> and social network means a system of social connections that binds individuals to the larger social structure. And without supporting these patients their likelihood of success diminished in disease control and thus returning to the normal life. The results showed that understanding support by sources, trauma patients have four special dimensions.

The participants expressed that they received the most support from the family. The supportive family means that attention and support from family bring hope and encouragement to the patient and make him/her feel respected, loved by others, and belonged to a social network of relationships and mutual obligations.

Social factors, particularly family, play an important and effective role in mental health of individuals.<sup>[37]</sup> Many studies have discussed the role of family in preserving health and strengthening social relations. Pistulka et al.,(2002) argued that the social support may serve as a protective shield between stress and depression. In a study on Korean immigrants in Maryland, they studied stress, social support and depression in 60-89-year-old people and found that stress and social support have a significant relationship with depression.<sup>[38]</sup> Another study was conducted in Tehran Veterans Hospice. The results showed that the presence of veterans at home beside the family had a positive impact on the disease symptoms. Moreover, the degree of suicidal ideation and the severity

of depression in the veterans hospitalized at home were reported significantly lower than those in hospices.<sup>[39]</sup>

Given the extensive relevant literature, there is no doubt about the importance of family sources in the preservation and promotion of hope in patients with amputation and even patients with other chronic diseases. For example, a study by Bland and Darlington (2002) showed that family support is the important source of hope for patients with mental disorders.<sup>[40]</sup> Studies by Vellone (2006) in Italy and Tan (2005) in Turkey showed that there is a positive significant relationship between the level of family support and hope in cancer patients.<sup>[41,42]</sup> In this regard, a study by Baider et al., (2003) showed that higher family support leads to a lower psychological stress in patients.<sup>[43]</sup> Since people with amputation spend much of their time with their families, family support is important in helping them to cope with amputation. The patients considered spouse, among family members, as the key member in supporting them. In fact, support by the patient's spouse is the main support source during disease periods. Spouse is the first support source for the patient and his/her presence as an individual who increases a sense of solidarity and belonging to others can have impacts on the health and function of the patient.<sup>[44]</sup> On the role of the patient's spouse in the patient recovery, Thompson and Lewin (2000) write: there is ample evidence that successful recovery and rehabilitation of stroke patients, adaptation in the convalescent period and restarting activities are largely dependent on the behavior of family members, particularly spouse.<sup>[45]</sup> In a cross-cultural study in three female groups (European-American, Chinese and Japanese), the results showed that Japanese women are extremely grateful for the support of their husbands, they have tangible support of their husbands in helping them to face with the consequences of the disease and their husbands take great efforts to protect them practically. Chinese women also expressed that their husbands are the most important source of support in the face of disease. While European women expressed that they have had the attention and care from their spouses in the face of disease, but they expected more support from them and what they saw was not what they expected. Given the relative cultural similarity of Iran and Eastern societies, our results are consistent with Japanese and Chinese women on the support of spouses, because Eastern women play roles such as supporter, relaxer and helper in the family. They do not expect a lot of care and attention, so changes in spouse's behavior and playing more supportive role were manifested very important for patients and in some cases, they were surprised because they did not expect all this attention and love from their husbands and perhaps they have been never faced with this kind of behavior on

their part in the past. That is why they are grateful for the attention and support of their husband. This theme was one of frequent items in facing the disease diagnosis and at the end of treatment.<sup>[46]</sup> In Iran, the study by Taleghani *et al.*, (2005) showed that the spouse is the most important coping sources for breast cancer patients<sup>[22]</sup> and the study by Stone *et al.*, (2005) showed that in total, patients in South Asia had a nice emotional support.<sup>[47]</sup>

Only in two of the participants, spouse could not bear problems and separated. Although, the participant experienced a very hard mental trauma, the family including spouse was prone to mental, social and health injuries due to multiple stress intolerance. In fact, spouse of a disabled person can primarily affect the mental health level of his/her spouse. Due to the problems caused by the disability of their spouses, they may experience different stresses so that some of them may go for divorce. This result is consistent with the study conducted by Faramarzi.<sup>[48]</sup>

The participants also mentioned the supportive role of friends in the process of adapting with amputation. The supportive role and behavior of their friends bolstered the sense that they are not alone in facing with problems and they can overcome the problems with the support of friends. In a study by Rambod (2010), cited by Ghodsi, most patients expressed that there is someone who love them and worry about them, and this increase their assurance and ability to cope with the disease.<sup>[49]</sup> In a study on patients with rheumatoid arthritis, Fyrand (2002) suggests that people with more friends have more social support<sup>[50]</sup> and this social support promotes consistency behaviors in them. The study by Abrahimi *et al.*, also showed that handicapped veterans with less depression reported more social support by friends.<sup>[51]</sup> In his study, Decker (2007) concluded that in cancer survivors, the support received from friends and mother has the greatest role in coping with the disease. However, the support received from mother is more important than friends.<sup>[52]</sup> In studies, conducted by Taleghani (2005), Hassankhani (2009) and Rahmani (2012), patients put emphasis on the importance and supporting role of friends in adapting and coping with their situation.<sup>[20-22]</sup> Despite the emphasis of the majority of participants on good support of friends, only one of them believed that after amputation, his friends abandoned him. In confirmation of this case, Lew (2007) suggests that due to the long duration of treatment and many problems of these patients, friends' attention to these people reduces over time.<sup>[53]</sup> Rejection by friends was reported not only in people with amputation, but also in other chronic diseases in some cases. In this regard, in a study on hemodialysis patients, Rambod *et al.*, (2010) state that when patients refer to the

dialysis centers, often none of the family members and friends are present. Even patients stated that their relationships with relatives and friends were reduced over time and now they do not receive any support from them. However, the change of life caused by hemodialysis and chronic renal failure increases the need to support from others.<sup>[49]</sup>

Subsequent to the support by family and friends, the participants seem to benefit from the support of the peer group and this group plays a prominent role in adaptation with amputation. Individuals in a particular social network, especially in the peer groups such as groups consisted of patients with similar disease can help each other in finding a solution to the problem, authenticating, navigating to the information, creating positive emotions and comfort. Communication with others is a central part in social support because social support is focused on understanding and recognizing each other's needs. Hildingh and Fridlund (2004) studied the impact of social support on the matched patients with similar clinical conditions and re-admission to the hospital. The results revealed that patients who participate in support programs of matched patients have more physical activity. They concluded that matched groups exchange experiences with each other and a collective spirit dominates the group so that they help each other to cope better with their disease. In addition, social processes such as social comparison, social learning and social exchange formed in the groups expedite the patients' recovery and adaptation.<sup>[54]</sup> In the study by Hernandez *et al.*, (1999), the participants believed that non-diabetic people cannot understand what they say. Thus, they learn from the peer group more than non-diabetic educators. Moreover, powerful communication and emotional networks in Iranian society is another reason for the use of peers and family as learning sources.<sup>[55]</sup> Dan *et al.*, (1999) evaluated support programs through the matched (homogeneous) group in patients with breast cancer. The patients stated that a meeting with volunteers who have experienced breast cancer caused them to feel less alone in dealing with the disease and be more hopeful about the future.<sup>[22]</sup> Several studies have pointed out the importance and positive role of the peer group in adapting with the disease.<sup>[20-22]</sup>

The workplace organization of the participants was the last support source, which paves the ground to strengthen a sense of hope to cope with the disease by creating job motivation and encouragement. Increasing productivity in the organization requires several conditions such as addressing the mental health of workforce from different aspects. Today, social support perceived by the employees of an organization is known as one of the most important psychological factors



influencing the labor productivity. In their study, Dolan *et al.*, (2008) noted that the lack of supportive factors in the workplace reduces the health level and quality of life of employees.<sup>[56]</sup> The lack of social support in the workplace detaches employees from each other and eventually ruptures the bond between them. In such a situation, disharmony and disruption make the staff to see their efforts inconclusive and become dissatisfied with their jobs and the governing relations in the workplace due to the lack of supportive feedback for their professional efforts. Subsequently, a kind of disappointment appears in personnel, threatening the survival, quality of life and organizational stability, in general.<sup>[57]</sup> In examining labor productivity indices, Bahadori *et al.*, (2010) studied 250 employees of Baghiatallah (PBUH) University of Medical Sciences. They found that the organizational support index is at the moderate level.<sup>[58]</sup> Wyatt and Chan (2007) believe that understanding and supporting the staff in the form of appreciation of the work are a strong index for increasing their job satisfaction and efficiency. They also believe that addressing the respect need of personnel as well as material and moral support will help the organization to achieve its lofty goals.<sup>[59]</sup>

## CONCLUSION

Throughout the process of recovery, rehabilitation and return to the ordinary life of trauma patients, they enjoyed social support of family members, peers, friends and the workplace organization. In fact, adaptation with the disease occurred in the context of social interactions with others. Given the importance of social support in adapting with lower limb amputation, future studies are recommended to identify other support sources and causes.

## REFERENCES

1. Wahlberg A. Driver behaviour and accident research methodology: Unresolved problems. Farnham: Ashgate Publishing; 2009. p. 19.
2. Krug EG, Sharma GK, Lozano R. The global burden of injuries. *Am J Public Health* 2000;90:523-6.
3. Saxena S, Sharan P, Garrido M, Saraceno B. World Health Organization's mental health atlas 2005: Implications for policy development. *World Psychiatry* 2006;5:179-84.
4. Sharma B. Development of pre-hospital trauma-care system--an overview. *Injury* 2005;36:579-87.
5. Courtney M, Beauchamp R, Evers B, Kenneth L. Sabiston Textbook of Surgery. 17<sup>th</sup> ed. USA: Elsevier; 2004.
6. Townsend CM. Sabiston Textbook of Surgery. Philadelphia: Elsevier-Saunders; 2004. p. 44-6.
7. Brunicaudi C, Andersen D, Billiar T, Dunn D, Hunter J, Pollock R, *et al.* Schwartz's Principles of Surgery. 8<sup>th</sup> ed. New York: McGraw-Hill; 2005.
8. Liu F, Williams RM, Liu HE, Chien NH. The lived experience of persons with lower extremity amputation. *J Clin Nurs* 2010;19:2152-61.
9. Lopes-Virella M, Carter R, Gilbert G, Klein R, Jaffa M, Jenkins A, *et al.*;

- Diabetes Control and Complications Trial/Epidemiology of Diabetes Intervention and Complications Cohort Study Group. Risk factors related to inflammation and endothelial dysfunction in the DCCT/EDIC cohort and their relationship with nephropathy and macrovascular complications. *Diabetes Care* 2008;31:2006-12.
10. Ebrahimzadeh MH, Rajabi MT. Long-term outcomes of patients undergoing war-related amputations of the foot and ankle. *J Foot Ankle Surg* 2007;46:429-33.
11. Warmuz A, Szeliga D, Krzemien G, Stemplewska B, Witanowska J. Rehabilitation of patients after lower limb amputation as a basic element of adaptation to normal life. *Wiad Lek* 2004;57:331-4.
12. Desmond D, MacLachlan M. Psychological issues in prosthetic and orthotic practice: A 25 year review of psychology in Prosthetics and Orthotics International. *Prosthet Orthot Int* 2002;26:182-8.
13. Pupulin E. The rehabilitation of people with amputation. 1<sup>st</sup> ed. Switzerland: Genova; 2004:77-9.
14. Vanaki Z, Parsa Yekta Z, Kazemnejad A, Heydarnia A. Interpretation of support for cancer patients under chemotherapy: A qualitative research. *Iran J Psychiatry Clin Psychol* 2003;9:53-61.
15. Asgari MR, Mohammadi E, Tamadon MR. The perception of chronic renal failure patients from advocacy resources in adjustment with hemodialysis: A qualitative study. *Int J Crit Care Nurs* 2011;3:133-44.
16. Helgeson VS, Cohen S. Social support and adjustment to cancer: Reconciling descriptive, correlational, and intervention research. *Health Psychol* 1996;15:135-48.
17. Clark AM, Barbour RS, McIntyre PD. Preparing for change in the secondary prevention of coronary heart disease: A qualitative evaluation of cardiac rehabilitation within a region of Scotland. *J Adv Nurs* 2002;39:589-98.
18. Cheng Y, Liu C, Mao C, Qian J, Liu K, Ke G. Social support plays a role in depression in Parkinson's disease: A cross-section study in a Chinese cohort. *Parkinsonism Relat Disord* 2008;14:43-5.
19. Taghavi M, Kalafi E, Talei A, Dehbozorgi G, Taghavi SMA. Investigating the Relation of Depression and Religious Coping and Social Support in Women with Breast Cancer. *Journal of Isfahan Medical School* 2011;28:16-21.
20. Hassankhani H. Process of Life With chemical injury of the Veterans. PhD dissertation Nursing. Tabriz: Tabriz university of Medical sciences; 2009. p. 69.
21. Rahmani A. The process of hopefulness in patients with cancer: A grounded theory study PhD dissertation Nursing. Tabriz: Tabriz university of Medical sciences; 2012. p. 56.
22. Taleghani F. Adjustment process in Iranian women with breast cancer. PhD dissertation Nursing. Isfahan: Isfahan university of Medical sciences; 2005. p. 111-2
23. Devine D, Parker PA, Fouladi RT, Cohen L. The association between social support, intrusive thoughts, avoidance, and adjustment following an experimental cancer treatment. *Psychooncology* 2003;12:453-62.
24. Burns N, Grove SK. The practice of nursing research: Appraisal, synthesis, and generation of evidence. Philadelphia: Saunders Elsevier; 2009. p. 33.
25. Polit DF, Hungler BP, Tatano C. Essentials of nursing research, 1993:52
26. Speziale HS, Streubert HJ, Carpenter DR. Qualitative research in nursing: Advancing the humanistic imperative: Wolters Kluwer health; 2011.
27. Polit D, Beck C, Hungler B. Essentials of Nursing Research, Methods, Appraisal and Utilization. Vol. 2. Philadelphia: Lippincott Williams and Wilkins; 2006. p. 11-23.
28. Mays N, Pope C. Qualitative research: Observational methods in health care settings. *BMJ* 1995;311:182-4.
29. Salsali M, Parvizi S, Adib-Hajbaghery M. Qualitative research methods Tehran: Boshra Publishing; 2004:67-8.
30. Montgomery P, Bailey PH. Field notes and theoretical memos in grounded theory. *West J Nurs Res* 2007;29:65-79.
31. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res* 2005;15:1277-88.
32. Green B. Personal construct psychology and content analysis. *Pers Constr Theor Pract* 2004;1:82-91.
33. Zhang Y, Wildemuth BM. Qualitative analysis of content. Applications of Social Research Methods to Questions in Information and Library Science 2009. p. 308-19.

Valizadeh, *et al.*: Social support in adjustment to lower-limb amputation

34. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105-12.
35. Priest H, Roberts P, Woods L. An overview of three different approaches to the interpretation of qualitative data. Part 1: Theoretical issues. *Nurse Res.* 2002;10:30-42.
36. Chernomas W, Clark D. Fostering social support for women living with serious mental illness. *Centres of Excellence for Women's Health. Res Bull* 2006;5:14-5.
37. Makros J, McCabe MP. Relationships between identity and self-representations during adolescence. *J Youth Adolesc* 2001;30:623-39.
38. Pistulka G, editor. *Acculturation Stress, Social Support and Depression among the Korean American Immigrant Elderly in Maryland. The 130<sup>th</sup> Annual Meeting of APHA; 2002.*
39. Kaplan HI, Sadock BJ, Grebb J. Synopsis of psychiatry, behavioral Science, clinical Psychiatry. *Sinopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry*, 1998. p. 88-9
40. Bland R, Darlington Y. The nature and sources of hope: Perspectives of family caregivers of people with serious mental illness. *Perspect Psychiatr Care* 2002;38:61-8.
41. Vellone E, Rega ML, Galletti C, Cohen MZ. Hope and related variables in Italian cancer patients. *Cancer Nurs* 2006;29:356-66.
42. Tan M, Karabulutlu E. Social support and hopelessness in Turkish patients with cancer. *Cancer Nurs* 2005;28:236-40.
43. Baider L, Ever-Hadani P, Goldzweig G, Wygoda MR, Peretz T. Is perceived family support a relevant variable in psychological distress? A sample of prostate and breast cancer couples. *J Psychosom Res* 2003;55:453-60.
44. Harden J, Schafenacker A, Northouse L, Mood D, Smith D, Pienta K, *et al.* Couples' experiences with prostate cancer: focus group research. *Oncol Nurs Forum.* 2002;29:701-9.
45. Thompson DR, Lewin RJ. Coronary disease. Management of the post-myocardial infarction patient: Rehabilitation and cardiac neurosis. *Heart* 2000;84:101-5.
46. Kagawa-Singer M, Wellisch DK. Breast cancer patients' perceptions of their husbands' support in a cross-cultural context. *Psychooncology* 2003;12:24-37.
47. Stone M, Pound E, Pancholi A, Farooqi A, Khunti K. Empowering patients with diabetes: A qualitative primary care study focusing on South Asians in Leicester, UK. *Fam Pract* 2005;22:647-52.
48. Faramarzi S. Effectiveness of cognitive-behavioral life skills and mental health of women with disable husband. *Q J Soc Welf* 2011;11:217-34.
49. Rambod M, Rafii F. Perceived social support and quality of life in Iranian hemodialysis patients. *J Nurs Scholarsh* 2010;42:242-9.
50. Fyrand L, Moum T, Finset A, Glennäs A. The impact of disability and disease duration on social support of women with rheumatoid arthritis. *J Behav Med* 2002;25:251-68.
51. Ebrahimi A, Zolfaghari F, Bolhari J. The relationship between social support coping with depression spinal injury. *J Psychiatry Clin Psychol* 2002;8:40-8.
52. Decker CL. Social support and adolescent cancer survivors: A review of the literature. *Psychooncology* 2007;16:1-11.
53. Lew SQ, Patel SS. Psychosocial and quality of life issues in women with end-stage renal disease. *Adv Chronic Kidney Dis* 2007;14:358-63.
54. Hildingh C, Fridlund B. A 3-year follow-up of participation in peer support groups after a cardiac event. *Eur J Cardiovasc Nurs* 2004;3:315-20.
55. Hernandez CA, Antone I, Cornelius I. A grounded theory study of the experience of type 2 diabetes mellitus in First Nations adults in Canada. *J Transcult Nurs* 1999;10:220-8.
56. Dolan SL, García S, Cabezas C, Tzafrir SS. Predictors of "quality of work" and "poor health" among primary health-care personnel in Catalonia: Evidence based on cross-sectional, retrospective and longitudinal design. *Int J Health Care Qual Assur* 2008;21:203-18.
57. Shirey MR. Social support in the workplace: Nurse leader implications. *Nurs Econ* 2004;22:313-9.
58. Bahadori M, Tofighi S, Ameriun A, Ravangard R, Abasi A, Jalalian M. Evaluation of Input Indicators Related to Human Resource Productivity in a Military Hospital in Iran. *Health Med.* 2010;4:323-7.
59. Chan KW, Wyatt TA. Quality of work life: A study of employees in Shanghai, China. *Asia Pac Bus Rev* 2007;13:501-17.

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