Introduction: Coronary artery disease is the most common type of cardiovascular disease. Despite the increasing number of patients with coronary artery disease, the lived experiences of these patients have remained unknown. The purpose of the study was to understand the lived experiences of elderly patients with coronary artery disease.

Methods: This qualitative research was conducted using an interpretive phenomenological approach. Participants included thirteen elderly patients (9 males and 4 females) with coronary artery disease selective of purposive sampling method from Coronary Care Unit of Shahid Beheshti Hospital in Qom, 2016. Data were collected through semi-structured interviews between 55 - 80 minutes. The interviews were recorded and transcribed. The Van Manen's proposed six steps was used to analyze the data.

Results: The main theme of study was "living with ups and downs". It included sub-themes of 1) losing calmness, 2) trying to achieve calmness through spirituality, 3) losing health, 4) trying to promote health through modification of lifestyle, 5) perceiving family support, 6) living in fear, 7) living with a damaged heart".

Conclusion: Findings of the research indicated that the coronary artery disease led patients to experience ups and downs for the participations. After the disease, they were trying to achieve calmness through some strategies. Members of the treatment team, especially nurses should provide self-care education for to make them be have successfully in this field.

Keywords: Experience, Coronary Artery Disease, Qualitative Study

with coronary artery diseases mostly rate of outbreak and risk factors for cardiovascular diseases (10). 

Despite previous study in Iran (11) these experiences have not yet been examined deeply and enough cognition is not available in this field. Therefore, it seems necessary to conduct a qualitative research to explain experiences of elderly patients with coronary artery disease deeply.

Cognition of these patients’ experiences leads to creation of a unique knowledge in this field and provides some information for members of the treatment team especially nurses about training, caring, and consulting this type of patients. The purpose of the study was to explore the lived experiences of elderly patients with coronary artery disease.

**Methods**

The qualitative study was performed using a hermeneutic phenomenological approach, a most commonly method for understanding meaning of lived experience. Van Manen believed that knowledge and understanding come through analyzing the reflective descriptions of people with relevant experience. Van Manen's proposed six steps were used to conduct this study (12). In Van Manen’s opinion hermeneutic phenomenology, a combination of description and interpretation, expresses that description and interpretation are not separated from each other. It should be noted that Van Manen's six steps are as a guidance to conduct the research and there is no obligation to observe the order in the steps. Each activity is explained in the following.

### The first step: Turning to the nature of lived experience

Van Manen expresses that the first step in studying a phenomenon is the researcher’s interest in nature of that research. The researcher’s attention was drawn to the phenomenon of the lived experiences of elderly patients with coronary artery disease since he was working in CCU of a hospital in Tehran.

### The second step: Investigating experience as we live it

Patients who referred to Shahid Beheshti Hospital in Qom city, Iran in 2016, underwent a purposive selection of participants with maximum variation sampling; nine men and four women. The inclusion criteria were willingness to participate in the research, talk about their lived experiences and age 65 years or older; and people with severe spiritual-psychological problems and physical diseases were excluded. Demographic characteristics of the study participants are shown in Table 1.

Deep semi-structured face to face interviews were carried out individually to collect data conducted in 55 to 80 minutes sessions in coronary care unit and heart unit of Shahid Beheshti Hospital of Qom. Interviews started with a general question about cardiovascular disease. The researcher let the participants to say their real experiences about coronary artery disease through his silence. In the case of needing more perception and explanation, the researcher used follow-up questions such as “would you please explain more about the issue” or “what was your purpose about the part which you said”. Interviews were continued until data saturation was achieved, in the study after eleven interviews, the interviews ended when no new data was resulted.

<table>
<thead>
<tr>
<th>Participant Number</th>
<th>Marital status</th>
<th>Occupation status</th>
<th>Age</th>
<th>Sex</th>
<th>Time after disease (y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Married</td>
<td>Retired</td>
<td>66</td>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Married</td>
<td>Farmer</td>
<td>71</td>
<td>Male</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Married</td>
<td>Housekeeper</td>
<td>62</td>
<td>Female</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Married</td>
<td>Self-employed</td>
<td>64</td>
<td>Male</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Married</td>
<td>Housekeeper</td>
<td>71</td>
<td>Female</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Married</td>
<td>Housekeeper</td>
<td>65</td>
<td>Female</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>Married</td>
<td>Retired</td>
<td>69</td>
<td>Male</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Married</td>
<td>Self-employed</td>
<td>66</td>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Married</td>
<td>Housekeeper</td>
<td>61</td>
<td>Female</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Married</td>
<td>Self-employed</td>
<td>65</td>
<td>Male</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>Married</td>
<td>Self-employed</td>
<td>72</td>
<td>Male</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>Married</td>
<td>Farmer</td>
<td>71</td>
<td>Male</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Married</td>
<td>Retired</td>
<td>73</td>
<td>Male</td>
<td>4</td>
</tr>
</tbody>
</table>
The third step: Reflecting on essential themes

Thinking in inherent themes was descriptor of the considered phenomenon. Researcher determined the main themes for the phenomenon of elderly patients' experiences with coronary artery disease through thematic analysis. Van Mannen has proposed three approaches for thematic analysis including holistic approach, selective approach, and detailed approach. It should be noted that holistic and selective approaches were applied in this study. In the process of data analysis, after converting audio files to texts, texts were studied several times accurately and general perception from participants' experiences was obtained through holistic approach, then researcher wrote some paragraphs and studied them several times accurately. He selected those sentences and phrases that described experiences of elderly patients with coronary artery disease and extracted them as semantic units. This semantic units were then written in a separate paper and placed in a separate category according to their semantic similarity, in order to obtain more general and abstract phrases.

The fourth step: Hermeneutic phenomenological writing

Van Mannen's approach is the art of writing and rewriting. In this stage the purpose was achieving a strong description of the phenomenon of elderly patients' experiences with coronary artery disease.

The fifth step: Maintaining a strong and oriented nursing relation to the Phenomenon

This stage is for maintenance of a strong and directional communication with the considered phenomenon. In this stage, in order to avoid getting away from the purpose of study, the researcher considered the main research question to maintain the strong and directional communication with the phenomenon.

The sixth step: Balancing the research context by considering parts and whole

Van Mannen is making a balance in the field of linking whole and detail. He worked on this stage by continues review of whole and detail through holistic and selective approaches and according to the main research question.

According to Lincoln and Guba, the authors verified the accuracy of the data with the four criteria of validity, reliability, credibility, and transferability. An effective communication was made with the participants based on trust to guarantee the validity of study. In order to increase the reliability of the data and create a deeper understanding of the phenomenon, the authors used prolonged exposure to the subject and obtained data, reviewing the data and matching them with the experiences of the participants and the observers' comments. To confirm the data, texts of the interviews were given to patients after analysis. Also, the research process was evaluated step by step through participation of the research team as well as other experts.

Ethical considerations

This article is resulted from the approved project of Shahed University with ethical code of IR.Shahed.REC 1395.108. The researchers received the allowance to conduct the study from the related authorities by introducing themself to Shahid Beheshti Hospital in Qom city. Then, they selected the participants and received verbal informed consent from them. The researchers committed to keep their personal information, interviews, and anonymity confidential.

Results

The research was conducted in order to perceive, identify, and interpret the lived experiences of elderly patients with coronary artery disease. Findings of the research indicated that the main theme of lived experiences of elderly patients with coronary artery disease was “living with ups and downs” including sub-themes of 1) losing calmness 2), trying to achieve calmness through spirituality, 3) losing health, 4) trying to promote health through modification of lifestyle, 5) perceiving family support, 6) living in fear, and 7) living with a damaged heart.

1. Losing Calmness

Most of the participants expressed that they had lost their calmness after disclosure of their cardiovascular disease and also hospital discharge. In their expression, they had suffered from worry, and anxiety, thought seriously about importance of heart in life and the fact that if the heart has problem, their lives might be in danger. They had lost their calmness by reviewing their heart task and further probabilities such as cardiac arrest and myocardial infarction.

About this issue a participant said: “man's life depends on heart; if a problem is made, the whole life is endangered, one of our neighborhoods had heart problem for years, the poor man had no relaxation, I am really not calm now”. Another participant said: “Those early days when I was told that I have a heart problem and should be hospitalized, I didn’t believe it at all. I didn’t have any problem. I was confused and believed that my life was ruined”.

2. Trying to Achieve Calmness through Spirituality

Following to become aware about the critical situation after the diagnosis of cardiovascular disease and discharge from hospital, the participants had concluded that they should keep calm to continue life. They utilized many strategies to keep calm. Many of them had resorted to spirituality and tendency to religious practices to keep calm.

About this issue a patient said: “After it became clear that I have heart disease I was trying to have night prayer, I woke up and spoke to God for one or two hours. I was calming myself down with this plan. Through this I was keeping my morale high. I could remove my anxious by reading Quran and saying prayer”.

About this issue another patient said: “After I was discharged, I told O Lord! You created us, our deaths and lives are in your hands. I just put my trust in God.”

A patient said about his prayers after heart disease: “I was only thinking of God, I prayed, I had confided myself to God and thanked God”.

3. Losing Health

Many of participants said they have not paid much attention to their health status before diagnosis of the disease and before appearance of the signs and symptoms of cardiovascular diseases. They had never thought that they might have cardiovascular problems. Having had disclosure of the disease, they felt that they had lost their health and each moment were waiting for its aftermath. The patients mentioned the importance of heart and considered its health as health of the body. One of the patients said: “with this heart disease I know I have lost my health, each moment my heart may become more clogged and have worse status. If man’s heart is clogged he will suffer from lesion”.

In many participants’ opinion, heart is the most sensitive organ of a body and needs high care and attention, but many of them didn’t pay attention to the issue before suffering from heart disease at all.

Another patient said: “Before suffering from the disease I didn’t know about sensitivity and vulnerability of heart a lot, if I had suitable food diets and exercised, maybe I did not suffer from heart disease now and I was healthy and peppy”.

4. Trying to Promote Health through Lifestyle Modification

After concluding that they need to promote their health, participants had used several strategies. They decided to modify their lifestyles to promote their health and hearts.

About this issue, one of the patients said: “man should do something before a problem happens, now that I have this situation I should try hard to maintain my health”.

Some participants mentioned instances on lifestyle modification: following suitable food and drug diets, regular referring to hospital in order to control cardiovascular status, managing stress, modifying work hours, regular and planned exercising, walking, and positive thinking.

A patient said about his decision to have further activity after diagnosis of heart disease: “I was very busy and I also wasn’t aware a lot, I did not know about the importance of the issue. For example, you should exercise an hour a week, control nutrients, and avoid cooking foods with high saturated oils. I used to go mountains once a week for one or two hours, but this was not enough for a person who is sitting all the time, should deal with customers, becomes angry regularly, and needs to work hard”.

Another patient said: “After diagnosis of the disease, I decided to have activity and do exercise, I shouldn’t sit in a place like old men, the situation was difficult”. Another participant mentioned his daily exercises and said: “After my heart disease, I exercised every day I woke up at 5a.m., went to park and exercised.”

Another patient emphasized the necessity to take care of heart and said: “After the disease, heart needs care and the suitable care is to avoid consuming salt, fat, and sweets according to physicians’ orders. Doctors gave us an instruction which we should observe, such as not eating salt, fat, and red meat. I observed these cases”.

5. Perceiving Family Support

Participants mentioned that they perceived family support more than before. They considered that family support from the patient is important and emphasized that this patient’s life depends on support of family. In this regard a participant said: “family support from a patient with heart disease is very important. If the family doesn’t support the patient, he/ she become effete and will die”.

A participant mentioned the effect of support from a patient with heart disease and said: “After the disease my family supported me a lot. If there is no support, the patient will suffer a worse disease. When I see my family is sympathetic, supportive, as well as cooperative and I have some facilities, I become motivated”.

6. Living in Fear

For patients living with coronary artery disease was always accompanied with fear, anxiety, uncertainty, fear of the future, and feelings of hopelessness so that all participants after suffering from cardiovascular diseases expressed such experiences. They were always afraid of heart attack, cardiac arrest, and sudden death. Being worry and having fear were so severe in some patients that they were worry about heart attack even in sleep. They were afraid of cardiac arrest during nights; feeling worry and fear caused disturbance in their sleeps.

In this regard, a patient said: “After heart disease I had much concern, I was too sad. Sometimes I slept and said I will die tomorrow morning and will not wake up”.

About living after heart disease a patient mentioned: “living with heart disease is with anxiety and worry; being worry about cardiac arrest and
Lived Experiences of Elderly Patients with CAD

Participants were using many strategies to keep calm and return to the normal situation. They utilized the strategy of spirituality, tendency to religious actions, and paid more attention to spiritual issues to keep and promote calm. Positive effect of suffering from coronary artery disease in elderly participants was the fact that they utilized several strategies. Considering the cultural and religious grounds of patients and also their religions, i.e., all of them were Shia, they all used spirituality and religion to keep calm and achieve calmness. Spirituality and tendency to spirituality are also experienced in patients with cancer, cardiovascular diseases, and chronic disease (3-17). Momen Nasab et al., mentioned “trust in God” in their research on patients’ experiences. Also, they added that heart attack makes spiritual dimension of participants more prominent and spirituality performs an important role to deal with such stressful and dangerous events of heart disease. They had expressed that spirituality had a significant effect on their recovery process from the starting moments of the disease towards recovery process (5).

All patients mentioned roles of their religious beliefs in bearing hardships and problems after coronary artery disease. Many researches have shown that patients use their religious beliefs in encountering problems and difficulties. Spiritual beliefs are to feel dependency on a divine and powerful force which causes life satisfaction and reduction of depression in patients (18, 19).

Participants were adapted to their problems by remembering power of God in all affairs of life and by resorting to Quran and Imams. They were always mentioning the holy verse of “Remembrance of God certainly brings comfort to all hearts” “Verily hearts become calm with rememberance of God”. Using spirituality in addition to compatibility with problems had effects on recovery process. In many studies the relation of spirituality, physical and psychological-spiritual health, as well as incompatibility with disease has been mentioned (5, 14, 17).

After experiencing coronary artery disease, patients concluded that they have lost their health and had to try to achieve it. All their efforts were in order to reach health again and even promote it through some strategies. They had decided to modify their lives to promote their health. They were utilizing some strategies such as managing stress, regular exercising, modifying working hours, and changing food diet. After a heart event, patients had no other way to modify lifestyle.

AfrasiabiFar et al., wrote: "elderly people have used some approaches to reduce consequences of the disease and return to previous life after heart attack despite tensions and limitations. They believed returning to normal life requires maintenance of abilities despite the existing limitations. For this purpose, patients had considered self-reliance and self-care as their strategies (20)."
mostly depends on family support. Some experts described family support as the level of having affection, companionship, care, respect, attention, and received help by other people, groups, friends, and others. Patients also mentioned that they received affection, companionship, support, and encouragements from their families.

Attention of family to patient is one of the most essential kind of care, according to Iranian culture, since families have deep relationships with members. Many reports are available about effects of families 'supports on patients. Supporting patients prevents from the outbreak of physiological effects of disease, increases self-care, and has a positive effect on physical and social statuses of patients. Also, family support increases patient's performance (5, 21,22).

For patients, living with coronary artery disease was always accompanied by fear, anxiety, worry so that all participants had experienced fear after disclosure of the disease. They were always afraid of heart attack, cardiac arrest, and sudden death. The prevalence of worry and fear of heart attack were so high in some patients that they felt them even in sleep. The negative feelings of anxiety and fear caused disturbance of their sleeps. Afrasiabi Far et al., expressed experience of patients' lives after heart attack as “in shadow of fear”. Theme of life in shadow of fear had sub-classes of death fear by having another heart attack, fear of physical disability, and fear of becoming dependent to others. Fear of cardiac arrest and sudden death is one of psychological responses of elderly patients with heart attack which they experience from beginning of symptoms (20, 23). Experience of fear included fear of death during sleep and fear of pain during going out from house (3, 24). Participantsmentioned importance of heart in lifetime. They mentioned heart as the “king of body”. This feeling that heart is damaged now made them to be always worry. Theysuffered from fear, worry, and feeling that they should face death very soon due to damaged heart. In a research, “seeing death” and “the verge of death” were reported as heart disease themes (3, 25).

Patients had feelings of hopelessness about future of their lives following feelings of damaged heart and mental involvement. This experience was challenging for them and made them worry that their physical statuses may become worse every moment. Feelings of hopelessness had affected all aspects of their lives(8). Fear of disability to do the routine actionsand dependency to others were most prevalent fears of most patients.

Conclusion

Findings of the research indicated lived experiences of elderly patients with coronary artery disease. The coronary artery disease had made them to lose their calmness. They were trying to achieve calmness by tending to spirituality and doing religious activities. Aware of coronary artery disease, patients imagined that they have lost their health and via modifying lifestyle, they were trying to promote their health. They were supported by family along with their claim of high positive effects of family members on heart disease. Their lives was with fear, anxiety, worry, and feeling of hopeless. They imagined that their hearts are damaged and should continue their lives with damaged heart. All findings of this study emphasized on necessity of training patients and their family members. Also, findings of the research can be used in care, training, and managing fields. Therefore, professors and trainers of nursing, nurses working in clinic and society, nursing mangers, patients 'planners and families can use findings of the research to promote patients 'training, consulting, quality of care and support from patients more and more.

It is suggested to conduct a study in the field of strategies of achieving calmness and effects of religious consultations on promoting calmness and giving confidence to patients’ lives suffering from coronary artery disease.

Study limitations

Some limitations of qualitative studies are small sample size and the inability to generalize the results. The forgetfulness of some elderly participants about their experiences can be considered as another limitation of this research.

Conflict of interest

None.

Acknowledgment

This article is resulted from the approved projects of Shahed University IR. Shahed. REC 1395.108. Hereby, the financial support of the university and participants' cooperation in the study are appreciated.

References


