

ORIGINAL**Illness experiences of patients with ischemic heart disease during their transitional phase from hospitalization to discharge in Japan**

Yuko Yasuhara¹, Sanae Takada², Tetsuya Tanioka¹, Chiemi Kawanishi¹, and Rozzano C. Locsin³

¹Department of Nursing, Institute of Health Biosciences, the University of Tokushima Graduate School, Tokushima, Japan ;²Department of Nursing, Kyoto Tachibana University, Kyoto, Japan ;³Florida Atlantic University, Christine E. Lynn College of Nursing, Florida, United States of America

Abstract : The purpose of this study was to explore the experience of patients with ischemic heart disease (IHD) during the transitional phase from hospitalization to discharge. Twenty-four patients who experienced IHD for the first time comprised the sample of the study. Semi-structured interviews were conducted during the transitional phase. The results of the qualitative inductive analysis showed two categories of illness experience : (i) the connection of heart attack experience with the self, and (ii) the instability of the self as a patient with heart disease. The participants were found to vacillate between the self as patient with a heart disease and the typical self before the disease onset. The transitional phase is the time when patients experience changes in their symptoms and physical conditions rather than a condition of stability signifying recovery. Patients are expected to manage the symptoms of their heart disease by themselves ; however the participants showed signs and symptoms of confusion and anxiety about facilitating their own care. These findings suggest the importance of outpatient nursing practice focusing on the support and emphasis on nursing interventions for patient anxiety and alleviation of confusion through the management of symptoms of heart disease after discharge. *J. Med. Invest.* 57 : 293-304, August, 2010

Keywords : *transitional phase from hospitalization to discharge, experience of patients, ischemic heart disease, outpatient-nursing*

INTRODUCTION

According to the Population Statistics of Japan in 2006 (1) heart disease was the second highest cause for death, and the number of deaths due to ischemic heart disease (IHD) was about 75,000, accounting

for 6.9% of the total number of deaths. Although the development of medical technology, such as a drug-eluting stent for the coronary artery, has helped the hospital death rate of acute myocardial infarction fall to less than 10 percent (2), IHD is an illness that can easily cause restenosis and reinfarction in the coronary artery.

In Japan, the shortening of the hospital stay has been recognized for the purpose of reducing the escalating medical cost. Consequently, this has made a situation in which patients cannot appreciate full recovery both physically and mentally. Additionally,

Received for publication May 14, 2010 ; accepted July 1, 2010.

Address correspondence and reprint requests to Yuko Yasuhara, RN, MSN, Department of Nursing, Institute of Health Biosciences, the University of Tokushima Graduate School, Kuramoto-cho, Tokushima 770-8509, Japan and Fax : +81-88-633-7629.

there is the possibility that the discharge proceeds without providing sufficient time for patients to be mentally prepared for the life after discharge (3). Furthermore, it has been reported that patients experience a threat, uncertainty, and emotional instability during the stage of recovery after discharge (4).

IHD and Heart failure has been pointed out to affect the quality of life of patients in the aspect of health (5, 6), and thus a comprehensive symptom management and a prevention and treatment program are recognized as important. However, patient symptom management after discharge is critical since the diffusion rate of comprehensive cardiac rehabilitation is low in Japan. Consequently, it can be inferred today, that patients can face various kinds of difficulty and problems more than ever before.

Previous research on patients with IHD include those that focus on the meaning of the illness (7), the experience of patients in the acute phase (8-10), and the survival experience of the patients who underwent myocardial infarction (11, 12) or the experience that seeks out the symptoms of myocardial infarction and its care, clarifying common patterns in recognition, emotion, and behavioral reaction (the flow to a decision) toward the symptoms (13). Through the experience of heart attack, patients with IHD are considered to undergo various experiences with their bodies which are different from those before the onset of their illness and due to changes in their environment. Nevertheless, not many research studies (14-19) are conducted on the experiences of first-time patients affected with IHD, thus this study.

This paper describes what experiences patients with IHD in the transitional phase to discharge undergo. Clarifying this phenomenon leads to the consideration of how symptom management and continuing nursing care can be influenced by the experience of transitioning by those persons who have had IHD.

DEFINITION OF TERMS

The transitional phase to discharge :

This is the period starting from the time when a patient moves from the Coronary Care Unit (CCU) or the emergency ward to the general ward and one month after discharge from the unit or hospital.

Illness Experience

It is the encounter of a patient on a daily basis about his/her environment and interaction with others. This includes the ways in which the patient accepts, interprets, and implicates his/her own illness during a particular phase in his/her experience.

METHODS

This is a descriptive study based on a qualitative descriptive design which attempts to describe what patients are experiencing as derived from their narratives.

SUBJECTS

The study took place in two general public hospitals located in the Kansai, Japan area. The data collection was done from June to November 2002. The participants of this research met the following inclusion criteria : [1] those who were hospitalized for IHD for the first time and their illness progressed well toward wellness ; [2] those who were not suffering from other illnesses which were life-threatening, [3] those who were able to narrate their experiences, [4] agreed to be a participant in the study, and [5] participants were patients without a heart failure or life-threatening arrhythmia.

If there are patients who meet conditions in research period, patients was explained by the researcher with help from attending doctors or ward nursing manager. Among 34 patients, 7 patients refused participation for the reasons of instability of physical condition or being not good at talking, 3 patients interrupted on the way. There were 24 participants in the study : 13 men and 11 women. They were hospitalized for the first IHD and met all the criteria for participant selection in this study (Table 1).

DATA GATHERING

Semi-structured interviews were conducted and participatory observation was made in order to gather data for the research study. As a general rule, the interviews were conducted three times whenever possible.

Table 1 Characteristics of the subjects

	years(mean± SD)	range
Age	60.8± 10.0	43-78
	n	%
Sex		
Male	13	54.2
Female	11	45.8
Type of treatment		
Percutaneous Transluminal Coronary Angioplasty	20	83.3
Coronary Artery Bypass Grafty	3	12.5
Conservative medical management	1	4.2
Diagnosis		
Acute myocardial infarction	15	62.5
Angina pectoris	9	37.5
Living arrangement		
With family	23	95.8
Alone	1	4.2
Occupation		
With a job	10	41.7
Inoccupation	14	58.3

- A. The first interview was held during the hospitalization period just before discharge. The first interview was conducted within 10 to 15 days after the onset of the subject's illness. This means that the first interview was held between the third day before discharge and the day of discharge.
- B. The second interview was done at the first outpatient care visit after discharge. The second interview was held between two to four weeks after discharge
- C. The third one was at the second outpatient care after discharge. The third interview was held between the first to third months after discharge.

The shortest interview lasted 25 minutes, and the longest one lasted 100 minutes. Despite our attempt not to exceed 60 minutes in an interview, these interviews were conducted when a patient's condition was stable so as that the interview data will most contributory to the cause, and to avoid distracting his/her narrative. For the purpose of clarifying what the patients had been experiencing, no question was asked on the treatment methods they had received.

THE INTERVIEW QUESTIONS

The first interview started from the question "Please tell me about your heart attack" and asked the patients what they thought about the disease and what approach they were going to take in their

life after discharge. In the subsequent interviews, they were asked to tell about what approach they had taken against the disease and what they considered about their life, with such questions as "How is your life after discharge?"

In the interviews, the patients were told that we would like to closely examine the words they used in giving their accounts. With their consent, their narratives were tape-recorded and written records were created. The facial expressions, the tone of the voice, and the acts of the subjects which were difficult to be clarified only by interviewing were recorded to the observation note. This was used as complementary data for construing the results in detail.

DATA ANALYSIS

In this research, a qualitative inductive analysis based on the grounded theory approach was done. This theory is led from the insight of Symbolic Interactionism, and we used this approach in order to clarify illness experience of patients with IHD. The data analysis was conducted in the following manner :

- After transcribing the interview narrative, by repetitively reading the noted data and thinking primarily of what experience the patients might undergo, important contents in the narrative record of each patient were highlighted.
- Then, the highlighted words, phrases, and

statements were labeled. Among the labels found, similar ones were categorized together.

- The data which were added later in the analysis were coded, and then considered for the degree of conformance to the created categories, and the details of the categories were adjusted.
- The extracted categories were organized in order of the time course and schematized. Then, the relevance of the categories and subcategories was analyzed.

The interpretation of the contents in an interview was checked with the subject in the subsequent interview to see if there was any misunderstanding. When necessary, the information was corrected in order to improve the reliability and adequateness of it.

ETHICAL CONSIDERATION

This study was approved by the ethical committee of Kobe City College of Nursing, Japan. The following points were carefully explained orally and in writing: the purpose and content of the research, the voluntary nature of participation, and that refusal

of participation would not cause any disadvantage, the freedom of approving or disapproving his/her result to be used in the presentation of the research, and the right for their anonymity and for the security of confidentiality.

RESULTS OF THE STUDY

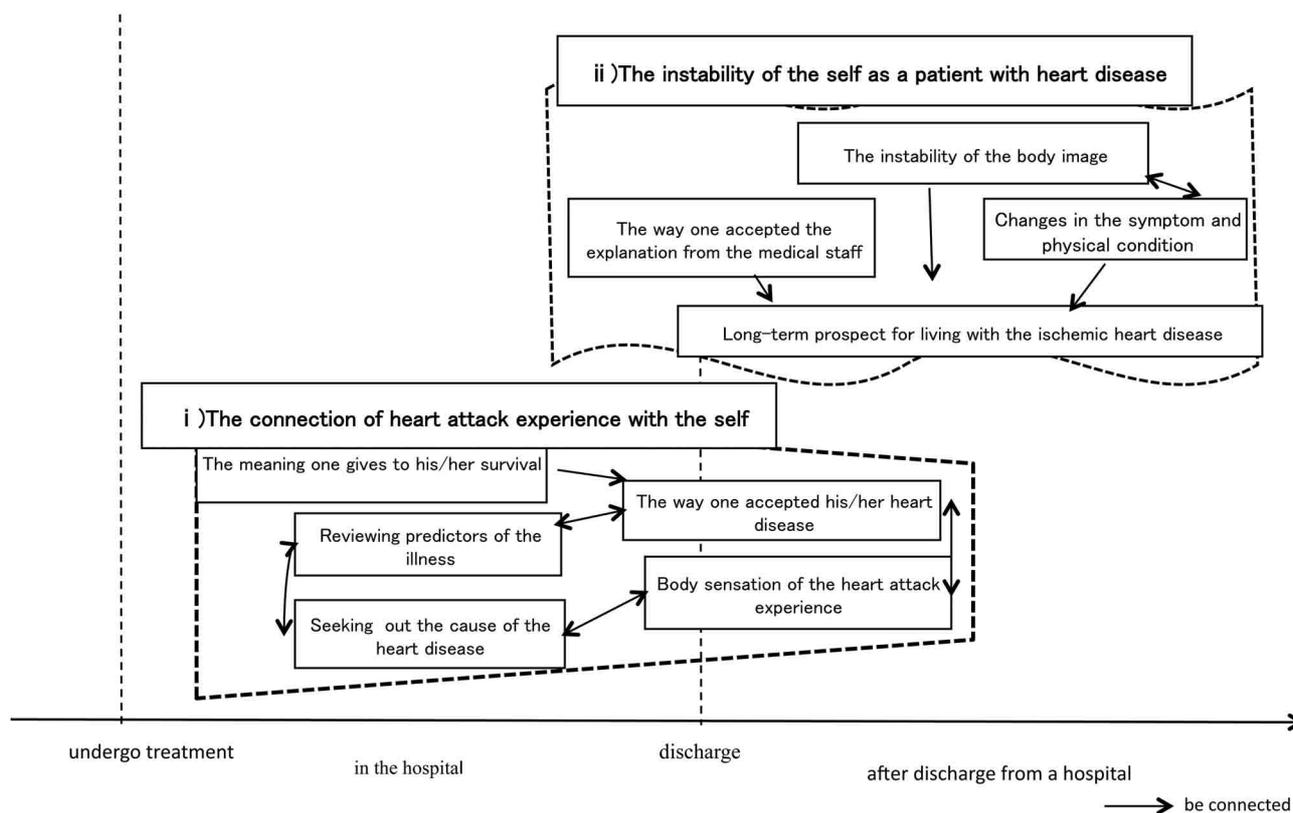
Table 2 shows the result of the analysis. The illness experiences of the participants were classified into two major categories: The connections of heart attack experience with the self, and the instability of the self as a patient with heart disease. First category was composed of five, and second category was composed of four subcategories. In this study, the subcategories are represented with ⟨ ⟩, and enclosed in quotation mark “ ” is a code. The sentences in italics represent the narrative of the patients.

Following are the findings of the study. Each category will be labeled, described, and explained in relationship to the sub-categories. Verbatim narratives are used to provide audit trails from which are derived the findings of the study.

Also, following figure shows the relations between the categories and the subcategories.

Table 2 The categories, subcategories, and codes of illness experiences patients with ischemic heart disease

Code	Subcategory	Category
Something is strange. Maybe that was it. Nothing rang bells.	Reviewing predictors of the illness	i) The connection of heart attack experience with the self
Fear which made them think of death. Unusual pain and distress. Being uncounscious and unaware of what was going on. Not too bad.	Body sensation of the heart attack experience	
Lifestyle habits until now. Things we cannot avoid in our lives. I do not know.	Seeking out the cause of the heart disease	
No way, I cannot believe I have a heart disease. I could not grasp the seriousness of the matter. I have prepared my mind for it to some extent.	The way one accepted his/her heart disease	
Thanks to the people supporting him/her such as the medical staff and his/her family. I was lucky.	The meaning one gives to his/her survival	
Roughly feeling recovering. Recovering with feeling uneasy about the chest condition sometimes. Feeling uncomfortable rather than recovering. Physical symptoms in the body other than the chest.	Changes in the symptom and physical condition	ii) The instability of the self as a patient with heart disease
Treatment almost completed but the situation could get worse. No choice but to continue to take medicine. Constricted portion remaining in the coronary artery. Not sure.	The way one accepted the explanation from the medical staff	
Loss of confidence in health. Confusion about the different body compared with the one before developing the illness. Starting to accept the illness. Feeling uneasy.	The instability of the body image	
Things which supported one's life with heart disease. Anxiety about the future as a patient with heart disease. The attitude toward living with heart disease.	Long-term prospect for living with the ischemic heart disease	



A horizontal axis shows the axis of time until the patient returns to life at home from hospitalization through discharging hospital. The arrow in the figure shows the relations between subcategories.

Figure The relations between the categories and the subcategories

i) THE CONNECTION OF HEART ATTACK EXPERIENCE WITH THE SELF

Through the heart attack experiences, the patients reflected on themselves who happened to develop heart disease. From this, 5 sub-categories were found. These are ; <Reviewing predictors of the illness> ; <Body sensation of the heart attack experience> ; <Seeking out the cause of the heart disease> ; <The way one accepted his/her heart disease> ; and <The meaning one gives to his/her survival> .

REVIEWING PREDICTORS OF THE ILLNESS

Those patients who had experienced a sudden heart attack looked back on their past for predictors of the illness and the situation at that time. Among them, there were those who remembered some kind of physical abnormality which had made them think that “Something is strange”, or remem-

bered some incidents which could be a predictor of the illness and made them think that “Maybe that was it”. One woman aged 70 had been told by her doctor that her heart had a slight hypertrophy. Although she experienced some pressure on her chest, she did not want to admit that she might have heart disease. She said,

I felt pain and that something was wrong... It was not a normal tight feeling. I had a sense of the disease, for three days. But I kept quiet to anyone.

Those patients who tried looking back and answered “Nothing rang bells” said that they had been surprised at the attack. The man aged 53 years old did not have what could be a predictor, and was surprised at the sudden attack.

I did not feel much... It just... a sudden pain on my chest. There must have been something. Just pain on my chest without a sign. I had not experienced such pain before ; it was not a normal pain. But this kind of predictor. I did not really care about it.

BODY SENSATION OF THE HEART ATTACK EXPERIENCE

Rather than looking back on predictors of the illness, the patients their heart attack. Various types of experience were encountered by the patients as a body sensation ; for instance, there were those patients who experienced pain that made them think of death, particularly those who lost their consciousness at the time of the onset. A 55-year old man, whose attack experience was “so scary that he expected his death”, have had a near drowning experience at sea. The onset was just the same as the near-drowning, He felt an impending sense of death in his mind.

In my case, I had once experience a near-death when I almost drowned at sea, at the age of 28... (omitted) I was rescued at the very last moment. I was not really conscious and really felt I was dying. This time is the same. I thought “This is bad”. It was like “This time I cannot make it”.

One man lost his consciousness when he was in the middle of a sales visit. He had been healthy before then. He regained consciousness while being treated. Thus, he was trying to fill-in the missing time with information from the people around him during the time of the attack.

I fell down when I was thinking to move on to the next company after having lunch at a hotel. I do not really remember it, though... I fell down and became unconscious when I was trying to get water at the counter as I felt thirsty. I was told that someone called an ambulance, and I was taken to this place (hospital).

SEEKING OUT THE CAUSE OF THE HEART DISEASE

The patients were looking back on their past and thinking about causes for their heart disease through their attack experiences. This ‘seeking out of the cause’ was mostly told in the first interview, but there were some patients who were continuously trying to seek out the cause even after discharge. They reflected on themselves by listing various factors causing their illness. Various factors were listed as triggering the ones for their heart disease, for example : “lifestyle habits until now” which included unbalanced eating habit, ill diet,

smoking, and the lack of awareness of the disease ; and “Things we cannot avoid in our lives” such as stress. Also, some participants answered “I do not know” despite their attempt to think of a cause.

A 53-years old man thought physical fitness was important as he was a sales representative. Hence, he often consumed greasy foods for the purpose of increasing his stamina. Not until he received a nutritional instruction before discharge, did he realise that his eating habit was unbalanced.

Actually, I took a huge amount of fat on the whole. For example, foods like a broiled cutlet on a skewer, lard is used in it, isn't it? It may not be good.... First of all, I had better keep off fatty foods. It is difficult to change everything at once, though... I like to have a volume, too...

THE WAY ONE ACCEPTED HIS/HER HEART DISEASE

After having experienced a heart attack and having been told by their doctor or family that they had heart disease, the patients had various feelings. As having heart disease was unexpected news, some were surprised as “No way, I cannot believe I have heart disease”, while some felt vague as they could not grasp the seriousness of the matter when they heard about the disease. Those who had had a family member with heart disease or those who had been anxious about their health felt surprised at their situation, but appeared to have accepted the fact as they commented “I have prepared my mind for it to some extent”.

A 53-year old man working at a pharmaceutical company was encouraged to go to hospital as he had an unpleasant feeling on his chest. The result of the examination turned out to be that he had angina pectoris. Because of the nature of his job, He had had certain knowledge about the disease, but his surprise was great when he heard about his disease

I think this is the first time that I have such a long leave. I was really surprised to hear that I had heart disease. I got surprised myself ; I guess it is even more surprising for others.

On the other hand, there were some patients who could not accept the seriousness of the disease. A 55-years old man was surprised to hear later that his heart had once stopped beating inside

the ambulance. However, he did not think of heart disease as a serious disease. He was torn between the excess worrying of the people around him and his understanding of the disease. He did not realise the seriousness of the situation.

I am the only one who does not feel this is as a serious situation as the people around me feel it is. My pain has subsided since I came here (hospital). The people around me communicate with me with great caution... I myself do not really understand the seriousness of this whole thing... I was once told by a nurse, but I felt like "what?"

THE MEANING ONE GIVES TO HIS/HER SURVIVAL

Although the patients were surprised at and confused about hearing that they had heart disease, they also felt relieved to face the fact that they were saved from the attack which could have caused death. The meaning the subjects gave to their survival from life-endangering heart disease was told mostly at the first interview. This was divided into two : those who associated their joy with luck or the God ; and those who associated theirs wit "Thanks to the people supporting him/her such as the medical staff and his/her family".

ii) THE INSTABILITY OF THE SELF AS A PATIENT WITH HEART DISEASE

The patients appeared to gradually face the fact that they were a heart disease patient while connecting their heart attack experience with themselves. From this category, the following 4 subcategories were extracted : <Changes in the symptom and physical condition> ; <The way one accepted the explanation from the medical staff> ; <The instability of the body image> ; and <Long-term prospect for living with the IHD>.

CHANGES IN THE SYMPTOM AND PHYSICAL CONDITION

The self as a patient with heart disease depends on daily chest symptoms and changes in the physical condition. Despite the disappearance of chest symptoms during the hospitalization period after

treatment, some patients experienced changes in their symptoms and physical conditions in their daily lives at home.

There were those patients who felt they were recovering steadily, while some felt both a sense of recovery and that of instability of their health alternately. A woman who had felt steady recovery before discharge sorely admitted that her life at home was not what it had been before.

As suspected, I feel tired easily. It is just like I cannot help but lie down. Once I lie down, I realise that I have things to do, though. Then, I get tired again after sorting things out. My life is like that now.

Moreover, many patients gave their narrative on their confusion about their way to cope with the symptom through <Changes in the symptom and physical condition>. This implies their search for an approach to their symptom, which was driven by their anxiety about another attack ; for example, they wondered whether their situation required an antianginal drug immediately or they should wait and see, and whether or not they needed to go to hospital.

THE WAY ONE ACCEPTED THE EXPLANATION FROM THE MEDICAL STAFF

Though many of the patients had their stenosed vessel treated, they accepted the risk of restenosis and consequently they could not push themselves as they had used to. A man, who had no chest symptom after treatment, understood that he could not push his body hard as he was explained about a likely risk of restenosis.

With myocardial infarction, the dead part of my muscle is hard to recover. Even if it does, it will take 6 months o... So, I need to be hospitalized once in 6 months... and continue outpatient care... I guess that is the way it is.

Meanwhile, there were some patients who were explained by the medical personnel but could not understand as it was difficult for them.

THE INSTABILITY OF THE BODY IMAGE

The patients felt instability in the image of their

own bodies as they got to know that they could no longer push themselves hard because of their heart attack experiences. This also depended on their view on health in the past. The more the patients had been confident in their health, the more they felt instability in accepting the present unhealthy body. Their narrative contained much of “Loss of confidence in health” and “Confusion about the different body compared with the one before developing the illness”. A man, who had been confident about his health, experienced the loss of confidence as he suddenly developed heart disease.

Oh dear, I have lost my confidence fully. I used to work with full confidence. Also, I played sports when I was a student. I was really confident about my physical fitness, but it dwindled at once.

Although the patients looked the same in appearance as they had used to be, they had a new body which caused a heart attack. They felt confused that they had to accept the different body. A man, who had an image of his heart as an iron heart, used to think his heart would not cause any problem easily. However, he felt confused as his iron heart had heart disease, and his body image became wobbly.

“My heart is an iron heart (wrote this on paper).” I had an image that it would not break easily. When I was a student, I was told by my teacher that a human heart would not break easily. That is what it is. So, I pushed my body too far, I think. So, my image of iron heart has fallen apart.

LONG-TERM PROSPECT FOR LIVING WITH THE IHD

The patients looked back on their past, viewed their lives in future while facing the selves as a patient with heart disease, and started having “The attitude toward living with heart disease”. “The attitude toward living with a heart disease” was influenced by the “Anxiety about the future as a patient with heart disease” as they worried about restenosis or another attack. It was also influenced by “Things which support one’s life with heart disease”, such as a purpose and/or encouragement in life.

DISCUSSION

i) THE CONNECTION OF HEART ATTACK EXPERIENCE WITH THE SELF

After the acute stage and having the condition stabilized, the patients were inferred to connect the reality that they developed heart disease with their selves by looking back on their past. This was characterized by five subcategories, mainly told in the first interview. These subcategories were recognized as a repetitive process to be experienced rather than the experience happening only once after a heart attack.

From these, we considered ⟨Reviewing predictors of the illness⟩, ⟨The feeling when finding out that one had heart disease⟩, and ⟨The way one accepted his/her heart disease⟩ as the two seemed relevant to each other. Those patients who had the feeling of “Something is strange” had felt uneasy about their conditions from before or clearly remembered their physical abnormality and ill conditions as a predictor of the illness as they had had a family member with heart disease. Consequently, some of the patients had visited a hospital before the heart attack. It was observed that even when they found their illness, they rather accepted the diagnosis calmly as they reacted with “I have prepared my mind for it to some extent”.

Benner (20) noted that taking a predictable situation into account as a possible situation to occur to oneself is one of the behavior to smoothly manage a great change in life and can be a means to readily handle even a change which causes a great loss. This is a way to deal with illness in important scenes of life by applying anticipation/prediction. The patients were considered to have anticipated the possibility of developing the illness as they had felt a predictor of the illness which was different from ones of other illnesses.

Just after treatment, some of the patients not only gave their narrative on the surprise and confusion caused by being told about their illness but also felt delighted about their survival from the life-endangering illness and gave a meaning to this experience.

The thought for living on the saved life was incomparably greater than similar thoughts from other organic illnesses or illnesses with different onset processes. This was considered to make them have a feeling of cherishing their heart which was the source of life (21). Subsequently, they not only looked back on their heart attack experiences but

also started to conduct (Seeking out the cause of the heart disease). This seeking out was inferred to have some impact on future treatment.

Ford (22), who has studied the meaning of life with heart attack experiences, indicates the importance of "Taking stock." The rising-up of the question "Why me?" to the surface is to look back on the past, which is not only helpful in finding the relationship between the cause and the illness but also in grasping the physical sensation in daily life. Additionally, it has been reported that this seeking causes has impact on approaches in future treatment (23). Although the way patients seek causes for illness influences future approaches toward illness, whether or not this continues during care depends on the involvement of social support with their families and workplace.

ii) THE INSTABILITY OF THE SELF AS A PATIENT WITH HEART DISEASE

The patients reflected on themselves-so-far by looking back on their heart attack experiences and through seeking causes for the illness. Also, their attitude was to slowly accept themselves as a patient with heart disease. On the other hand, the transitional phase to discharge was a period in which the patients struggled between their selves as a patient with heart disease and their-selves-so-far, which had been their conventional self-image. Their facing their selves as a patient with heart disease relates to (Changes in the symptom and physical condition), (The way one accepted the explanation from the medical staff), and (The instability of the body image), all of which are experienced currently. These are thought to connect with the attitude of living as a patient with heart disease.

Firstly, it was clarified that the patients were actually experiencing instability from the repetition of temporary recovery from chest symptoms (24) and their deterioration rather than feeling a stable recovery. Although many of the patients did not have chest symptoms in resting state during the hospitalization, many claimed that they had chest symptoms or changes in the physical condition to a certain degree after discharge. One of the reasons for this was that they tended to try hard just after discharge and after restarting their lives at home, not knowing the degree of the acceptable activities for their bodies. Strauss et al. (25) state that it is necessary for patients to take the measure of their

limitation in conducting daily activities for a mid and long term within the constraint of their illness in order to control the symptoms. The transitional phase to discharge can be considered as the time for patients in the middle of reorganizing their new lives with the illness to learn the boundary of how much they can conduct daily activities before symptoms appear.

In this research, we defined the transitional phase to discharge as about one month period, but the instability in physical conditions of the patients continued after one month since discharge. This inferred that they would go through various experiences later on. In other words, the patients were inferred to have returned home with accepting and interpreted chest symptoms and unthinkably serious incidents. From this, it is appropriate to see that the transition phase lasts at least for a few months.

Also, through heart attack experiences, the patients lost themselves-so-far and had to accept new-themselves, and this fact was thought to make them feel confused. Hence, through heart attack experiences, their bodies, which were thus their body images, could be expressed as in the state of instability. In a research which clarified the recovery of female patients from heart attack (26), "asking one's own belief" was found in the survival. This means that the belief on the unchanged concept of individuality and physical well-being becomes confused after heart attacks and patients go through the sense of loss and struggle.

In this research, the most narrated (The instability of the body image) was "Confusion about the different body compared with the one before developing the illness". Those patients who had lost consciousness in a heart attack listened to the explanation from the doctor and tried to understand the heart attack experience in the intellect. However, by feeling a contradiction from the conflict between the reality and their own body images, an unacceptable situation was emerged. In contrast, for those patients whose family member had been with the same illness or who had not been confident in health, the instability of the body image appeared to be moderate. In addition, the body image was inferred to change in the course of undergoing changes in the symptoms and body condition, while expanding the range of their activities after discharge. Further, returning home after discharge made patients face their troubled body sensation and feel confused about their different bodies from what they used to be. As shown above, the instability of the body

image was considered to relate closely to (Changes in the symptom and physical condition).

In addition, the patients started "Feeling uneasy" about their bodies which were different from what they used to be after heart attack experiences. They started to pay attention to the body which experienced heart attacks, just like feeling chest pressure and narrowness of the chest. This was considered to be one of the instability in the body image happened when accepting the self as a patient with heart disease.

When the patients face their selves as a patient with heart disease, (The way one accepted the explanation from the medical staff) is considered to influence their attitude toward illness. Those patients who received explanations on matters such as "No choice but to continue to take medicine" and "Constricted portion remaining in the coronary artery" have anxiety in varying degree about their future. This related to the anxiety about re-attack and restenosis in the coronary artery as shown by their comment "Not sure what can happen at any time" (27). However, this induced them to have an attitude against illness that they had to protect themselves. Their attitude implied that they totally relied on the doctor in their treatment as they did not try to listen to the explanation again. This coincided with the result : there is recognition that although a patient has his/her diagnosis, he/she does not understand his/her own condition or illness and thinks it is the doctor who is to manage his/her body (28). As mentioned, (The way one accepted the explanation from the medical staff) is inferred to influence the attitude towards managing one's own illness (29).

When accepting the selves as a patient with heart disease, the patients tended to have a view of a life with the illness. Heart attacks are an experience which, in varying degrees, causes fear to many patients, and (Long-term prospect for living with the IHD) is considered to depend on the (Apprehension of the heart attack experience).

The patients who experienced "Fear which made them thinks of death" underwent an unimaginable pain in their bodies. Thus, the fear for death did not disappear after some time and had a strong anxiety expressing. It has been clarified that patients with IHD heart disease face a threat to their lives increasingly and consequently their anxiety is high during treatment as well as after discharge (30). This shows that the anxiety about death is not to disappear soon.

Additionally, the patients who had lost consciousness due to heart attack and underwent a blank experience appeared to be confused, as they could not fill in the time gap when they lost their memory even by listening to others about the situation. For (Long-term prospect for living with the IHD), some patients felt anxious while the others did not feel so. One reason for this difference is that as some patients did not go through a painful experience and not realize that their illness was serious, they did not feel anxious. Next, there was a case in which although the patients had not thought their illness was serious at first, being treated by people around as a patient with a serious illness was likely to make them realize the seriousness of the illness and feel anxious about their future (31). From those, there were various feelings in the view for future.

Furthermore, it was clarified that in (Long-term prospect for living with the IHD), the patients had not only the anxiety about recurrence of heart attacks and restenosis in the coronary artery but also "Things which support their lives with heart disease". From these, the patients in the transitional phase to discharge were inferred to expect a normal life despite a strong anxiety for the future.

Consequently, in this period, patients feel symptom or physical condition change, and their minds were nervous condition for becoming patients with heart disease. In a present outpatient nursing system, nurses do not hear patients' feeling and empathy for them well. Therefore, it is thought that continuing nursing care with this in mind in the outpatient is necessary. Also, it is needed that spread of comprehensive cardiac rehabilitation, self-help group as a peer support group is encouraged to provide psychosocial services and maximize opportunities for interactions with other patients and health care providers.

LIMITATION OF THIS STUDY AND FUTURE DIRECTION

In this research, there remains a possibility that the illness experience of patients with IHD may not be sufficiently clarified due to the small number of the participating subjects. Also, treatment for IHD has been advanced day by day. Consequently, today's hospitalization period may be shorter than the period at the time of the data for this research. This may possibly cause the experience of such patients to be more complex. It is said that there is

difference in experience with illness vary with sex, age, therapeutic approach, and presence of the occupation. We tried to confirm to patients whether there is gap about interpretation of data. However, there is a possibility that bias are caused in the content because we interviewed them according to their concern. Based on these factors, it is necessary to increase the number of subjects and continuously collect the data.

CONCLUSION

In this study, the illness experiences of participants classified two major categories : (i) the connection of heart attack experience with the self, and (ii) the instability of the self as a patient with heart disease. In the transitional phase to discharge, the patients reflected on themselves who happened to develop heart disease, and they appeared to gradually face the fact that they were a heart disease patient while connecting their heart attack experience with themselves. From these results the researchers suggest that it is a necessary to emphasize continuing nursing care of patients after discharge from a hospital.

REFERENCES

1. Statistics Bureau, <http://www.stat.go.jp/english/data/handbook/c15cont.htm> (accessed 7/20/2009) (in Japanese)
2. Iwasaka T : CCU kara sinnriha kyoutuusennta-karakagakusenta- sonokokoromiha tadasiika. Official Journal of the Japanese Association of Cardiac Rehabilitation 11(1) : 11-13, 2006 (in Japanese)
3. Jackson D, Daly J, Davidson P : Women recovering from first-time myocardial infarction (MI) ; a feminist quantitative study. Journal of Advanced Nursing 32(6) : 1403-1411, 2000
4. Nasifowska-Barud A : Anxiety and fear level in patients after myocardial infarction over five years of rehabilitation. Ann Univ Mariae Curie Skłodowska Med 57(2) : 505-13, 2002
5. Tateyama M, Takahashi A : Anxiety and related factors in the recovery process of patients with ischemic heart disease. North Japan Academy of Nursing Science 5(1) : 17-25, 2002(in Japanese)
6. Krethong P, Jirapaet V, Jitpanya C, Sloan R : A causal model of health-related quality of life in Thai patients with heart-failure. J Nurs Schol arsh 40(3) : 254-60, 2008
7. Takahashi N, Aoki M, Aoyama M, Nakakura K, Miyamoto E, Okawa N : Awareness obtained from heart attack experience : Patients with acute myocardial infarction. Journal of Kochi Women's University Academy of Nursing 33 (1) : 107-114, 2008(in Japanese)
8. Hatamochi C : Meanings of the narrative perspectives in adult patients with myocardial infarction. Journal of St, Luke's Society for Nursing Research 7(1) : 9-16, 2003(in Japanese)
9. Kitamura N, Sato R : A study of the subjective experiences of acute myocardial infarction patients. Journal of Chiba Academy of Nursing Science 7(1) : 74-81, 2001(in Japanese)
10. Svedlund M, Danielson E, Norberg A : Women's narratives during the acute phase of their myocardial infarction. J Adv Nurs Jul 35(2) : 197-205, 2001
11. Asakura K : The lived body experience of patients with myocardial infarction. J. Japan, Acad. Nurs Science 18(3) : 10-20, 1998(in Japanese)
12. Johansson A, Dahlberg K, Ekebergh M : Living with experiences following a myocardial infarction. Eur J Cardiovasc Nurs 2(3) : 229-36, 2003
13. Rosenfeld AG, Lindauer A, Darney BG : Understanding treatment-seeking delay in women with acute myocardial infarction : descriptions of decision-making patterns. Am J Crit Care Jul 4(4) : 285-93, 2005
14. Svedlund M, Danielson E : Myocardial infarction : narrations by afflicted women and their partners of lived experiences in daily life following an acute myocardial infarction. J Clin Nurs 13(4) : 438-46, 2004
15. Albaugh JA : Spirituality and life-threatening illness : a phenomenologic study. Oncol Nurs Forum 30(4) : 593-8, 2003
16. Kerr EE, Fothergill-Bourbonnais F : The recovery mosaic : older women's lived experiences after a myocardial infarction. Heart & Lung 31 (5) : 355-67, 2002
17. Svedlund M, Axelsson I : Acute myocardial infarction in middle-aged women : narrations from the patients and their partners during rehabilitation. Intensive Crit Care Nurs Aug 16 (4) : 256-65, 2000
18. Svedlund M, Danielson E, Norberg A : Nurses' narrations about caring for inpatients with acute

- myocardial infarction. *Intensive Crit Care Nurs* 15(1) : 34-43, 1999
19. Theobald K : The experience of spouses whose partners have suffered a myocardial infarction : a phenomenological study. *J Adv Nurs* 26(3) : 595-601, 1997
 20. Benner P, Wrubel J : The primacy of caring : Stress and coping in health and illness. Menlo Park, CA : Addison-Wesley, Tokyo, 1989 (in Japanese)
 21. Hawthorne MH : Using the trajectory framework reconceptualizing cardiac illness. In : Woog P : The chronic illness trajectory framework- The Corbin and Strauss nursing model, New York, 1992, 1994, pp.49-65(in Japanese)
 22. Ford JS : Living with a history of a heart attack : a human science investigation, *J Adv Nurs* 14 : 173-179, 1989
 23. Rosenfeld AG, Gilkeson J : Meaning of illness for women with coronary heart disease, *HEART & LUNG* 29(2) : 105-112, 2000
 24. Esper RJ, Vilariño J, Cacharrón JL, Machado R, Ingino CA, García Guiñazú CA, Bereziuk E, Bolaño AL, Suarez DH, Kura M : Impaired endothelial function in patients with rapidly stabilized unstable angina : assessment by noninvasive brachial artery ultrasonography. *Clin Cardiol* 22(11) : 699-703, 1999
 25. Strauss A L, Corbin J, Fragerhaugh S, Glaster BG, Maines A, Suczek B, Wiener C L : Chronic illness and the quality of life. The CV Mosby Company, Saint Louis, 1984 (in Japanese)
 26. Fleury J, Kimbrell C, Kruszewski MA : Life after a cardiac event : Women's experience in healing, *HEART & LUNG* 24(6) : 474-482, 1995
 27. Horne G, Payne S : Removing the boundaries : palliative care for patients with heart failure. *Palliat Med* 18(4) : 291-6, 2004
 28. Fukue H, Iwamoto T : Study on the attitudes of male patients with ischemic heart disease toward their lives while they are under medical treatment, *Bulletin of The Faculty of social Welfare Yamaguchi Prefectural University* 5 : 57-63, 2001 (in Japanese)
 29. Schroepfer TA : Mind frames towards dying and factors motivating their adoption by terminally ill elders. *J Gerontol B Psychol Sci Soc Sci* May 61(3) : 129-39, 2006
 30. Artinian NT, Duggan CH : Sex differences in patient recovery patterns after coronary artery bypass surgery. *HEART & LUNG* 24 (6) : 483-494, 1995
 31. Lavie CJ, Milani RV : Prevalence of anxiety in coronary patients with improvement following cardiac rehabilitation and exercise training. *Am J Cardiol* 93(3) : 336-339, 2004