



# Patients’ Experiences of Acute Heart Failure : Qualitative Descriptive Study

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## Introduction

- In Japan, the number of patients hospitalized for acute heart failure was approximately 113,000 in 2017 and will be 132,000 in 2021, with the number of patients increasing due to the ageing population. In particular, the heart failure mortality rate in Ehime Prefecture is currently high for both men and women.
- Factors that contribute to the onset and exacerbation of heart failure include medical factors such as underlying diseases and exacerbation of comorbid diseases, as well as health behavioral factors such as understanding of the disease and treatment adherence, mental and psychological factors such as cognitive function, depression, and anxiety, and social factors such as family structure and social support. The importance of comprehensive management in cardiovascular care has been pointed out.

## Purpose

The purpose of this study was to investigate the causes of heart failure in Ehime Prefecture by interviewing patients diagnosed with acute heart failure and learning about their lifestyles and awareness of heart failure, and to obtain suggestions for preventing the onset and aggravation of heart failure.

## Methods

**Study design:** Qualitative descriptive study using semi-structured interviews. **Survey period:** November 2023 - January 2024

**The participants:** Patients who have been diagnosed with acute heart failure and admitted to a hospital in Ehime Prefecture, who have settled into stage B or C of the American Heart Association after acute treatment, and who are being considered for discharge to home.

**Survey content:** The semi-structured interviews were conducted based on the interview guide for the following items.

Demographic variables: age, gender, educational history, occupation et al. Medical variables: diagnosis, medical history, presence of long-term care insurance, utilisation of social resources such as long-term care services, presence of subjective symptoms and how to cope with symptoms, health behaviours, awareness of heart failure.

**Analysis method:** The interview records and verbatim transcripts were used to organize and describe the patients' responses to each of the three categories of "how heart failure developed," "lifestyle up until that point," and "perception of heart failure," and factors that may have led to the onset of heart failure were extracted.

**Ethical consideration :** The research was reviewed by the Research Ethics Review Committee of the Ehime University Graduate School of Medicine, and the Clinical Research Ethics Review Committee of the Research Collaborating Hospital.

## Results

### 1.The participants’ characteristics

10 patients gave informed consent to participate in the study. A summary of the participants is shown in Table 1.

### 2. Circumstances leading to acute heart failure

For seven of the ten patients, this was their first experience with acute heart failure.

Mr. A, who suffers from repeated acute heart failure, said, "I visit my family doctor once every two weeks to get medicine, but if it gets worse there (acute worsening of heart failure), I'm hospitalized here (at the research hospital), and this is the same thing that happened this time. Mr. G, who had a history of myocardial infarction and was re-admitted, said, "I don't know why, but about 10 days before (admission), I had been feeling drowsy. (I visited my family doctor) and was told that I should be hospitalized," and was admitted to the hospital as an emergency. Mr. F said, "My back pain had gotten so bad that I couldn't stand it, so I went

to the emergency room, and they told me that my heart was worse than my back," and he was admitted to the hospital. He was confused, saying, "I don't know why my heart was getting worse." Similarly, Mr. D said, "(The day before I was admitted to the hospital) I felt tired when I walked a little, but I was able to do my mountain work (farm work), so I left it as it was. The next day, I felt much more tired when walking than usual, and my son told me that I should go to the hospital, so I went to a nearby hospital, and they told me that my lungs had accumulated fluid and my heart was weak, so I was taken to my current hospital by ambulance." He was surprised to hear that he had a heart problem. 10 participants answered that they were familiar with the term heart failure, but none of them answered that they knew much about its causes or symptoms.

Table 1. The participants’ characteristics

	age	gender	Edu-his	occupation	medical history	Length of interview(min)
A	59	M	junior high school	part-time	MI	68
B	50	M	high school	full-time	DM type1 MI	64
C	73	M	university	retirement	COPD BI	73
D	88	M	junior high school	farmer	non	20
E	81	M	high school	full-time	LC HT	35
F	95	F	high school	housewife	TB	32
G	89	M	high school	retirement	MI	15
H	87	M	junior high school	retirement	CKD MI	26
J	78	M	junior high school	full-time	HT arrhythmia	21
K	86	M	vocational school	retirement	HT DM	23

### ■ Discussion

- As a result of the interviews, it was considered that there are two main factors that contribute to the development of heart failure: ineffective self-management due to lack of awareness of the causes and symptoms of heart failure and a sense of value that people want to spend their time the way they want to, and age-related decline in cardiac function.
- Heart failure is a long-term syndrome and it is essential to continue with medication and daily management of one’s condition. Therefore, in addition to respecting the patient’s beliefs and values, it is important to listen to the patient’s story, to support the patient by considering together self-management methods that the patient can continue to use, and to provide appropriate information and education. It is also important to support the patient in choosing a self-management method that is appropriate for them, taking into account their age, social background and ability to understand.
- Furthermore, it is often not easy for older people to change their previous long lifestyles, and it is important to respect and support them in living their remaining lives in their own way.

## Conclusion

In the event of acute heart failure caused by a lack of self-management or a decline in cardiac function due to aging, it is important to prevent acute exacerbations and maintain the quality of life while respecting the patient’s previous lifestyle. To achieve this, it is necessary to create a system in which patient information can be shared across multiple professions, including caregivers, discussed with patients, and effective support can be provided at the appropriate time.