

ORIGINAL ARTICLE 8 OPEN ACCESS

# Initiation of self-care practices in heart failure patients: a phenomenological study

Tony Suharsono<sup>1,2</sup>\*\*, Ikhda Ulya<sup>2</sup>, Sri Yona<sup>3</sup>, and Bambang Budi Siswanto<sup>4</sup>

- Doctoral Candidate in Nursing, Faculty of Nursing Science, Universitas Indonesia, Jakarta, Indonesia
- <sup>2</sup> Faculty of Health Sciences, Universitas Brawijaya, Malang, Indonesia
- <sup>3</sup> Faculty of Nursing, Universitas Indonesia, Jakarta, Indonesia
- <sup>4</sup> Faculty of Medicine University Indonesia, National Cardiovascular Center Jakarta, University Indonesia, Depok, Indonesia
- \*Correspondence: Tony Suharsono. Address: Doctoral Candidate in Nursing, Faculty of Nursing Science, Jakarta, Universitas and Indonesia and Faculty of Health Sciences, Universitas Brawijaya, Malang. Indonesia Email: <a href="mailto:suharsono.fk@ub.ac.id">suharsono.fk@ub.ac.id</a>

Responsible Editor: Rizki Fitryasari

Received: 4 March 2024 ORevised: 26 May 2024 OAccepted: 28 May 2024

#### **ABSTRACT**

**Introduction:** The incidence of heart failure continues to rise with advancing age, unabated by advancements in healthcare technology. Patients with heart failure are required to manage their care independently at home for the remainder of their lives. This study aimed to delve into the experiences of heart failure patients regarding self-care management at home.

**Methods:** Nineteen patients with heart failure were chosen through purposive sampling and thorough interviews were conducted to collect their self-care treatment experiences. Content analysis was carried out to scrutinize the acquired data.

**Results:** The analysis revealed four themes: patients' perception of heart failure diagnosis, efforts in self-care, readiness for self-care, and adoption of new healthy behaviors in heart failure. Eight categories were formulated within these themes, including "transitioning into a heart failure patient;" "recognizing the need for self-care;" "seeking information and heart failure therapy;" "facilitators and barriers in seeking information regarding self-care;" "social support and belief in engaging in self-care at home;" "self-confidence in engaging in self-care at home;" "efforts to develop self-care strategies;" and "engaging in new healthy behaviors as heart failure patients independently."

**Conclusions:** Patients become aware of the necessity for self-care upon experiencing discomfort due to symptoms resulting from their heart failure. Family support and the patient's belief system play pivotal roles in initiating self-care practices at home. Nurses should provide support to patients in fostering self-care practices within their homes.

Keywords: heart failure, phenomenological study, self-care

## Introduction

Heart failure represents a global health concern characterized by high mortality rates, morbidity, poor quality of life, and diminished functional capacity. Globally, the population afflicted by heart failure stands at approximately 64 million individuals. Mortality rates among heart failure patients range between 2-3% within 30 days post-treatment, with only 50% surviving beyond five years(Savarese *et al.*, 2023). In the United States and

Europe, the prevalence varies between 1-3% among the adult population, escalating to over 10% among those aged over 70 years(Agarwal, Fonarow and Ziaeian, 2021a). Southeast Asia, as indicated by Lam et al. (2016) and MacDonald et al. (2020) reflects similar trends, where the mortality rate due to heart failure stands at 13.6% within the first year. In Indonesia, according to Reyes et al. (2016), the prevalence of heart failure incidents amounts to 5%. The mortality rate among heart failure patients within the initial year is 11.3%,



accompanied by a 17% readmission rate. The rates of readmission and mortality within the first year due to heart failure in Indonesia remain notably high.

Heart failure necessitates lifelong self-management behavior to maintain stability, including adherence to modifications, medication, lifestyle symptom monitoring, and decision-making in response to symptom changes (Riegel et al., 2019; Agarwal, Fonarow and Ziaeian, 2021b; Jiang and Wang, 2021). Self-care is integral to sustaining patients' stability post-hospital discharge (White, Kirschner and Hamilton, 2014) and this encompasses complex activities aimed at preserving health, symptom monitoring, and appropriate response to emerging symptoms. Emphasizing symptom monitoring and seeking assistance is crucial within selfcare (Attaallah, Klymko and Hopp, 2016; Riegel, Dickson and Faulkner, 2016). Nurses play a pivotal role in assisting heart failure patients in effectively conducting self-care.; therefore, understanding how patients develop self-care strategies enables nurses to provide tailored approaches to the heart failure patients under their care. Currently, there's limited research depicting how patients develop self-care practices; however, some studies emphasize the importance of heart failure self-care (Chamberlain, 2017; Kessing et al., 2017) and identify factors associated with heart failure patient selfcare (Jaarsma et al., 2017; Chae et al., 2022; Patrick et al., 2022).

Self-care in heart failure is crucial and positively impacts patient outcomes, yet many patients have not fully embraced it (Jaarsma et al., 2013; Jiang et al., 2023). Self-care consists of three components: maintenance, monitoring, and management, yet most patients only engage in self-care maintenance, including in Indonesia. Several qualitative studies have explored the implications of living with heart failure (Fry et al., 2016a), disease management (Farmer et al., 2016), and the experiences of living with heart failure (Su et al., 2023), yet they do not provide insights into how patients develop self-care practices to cope with their heart failure. Limited knowledge (Jaarsma et al., 2020; Riegel et al., 2021; Kim and Cho, 2021; Hashimoto et al., 2023) exists regarding the decision-making process and stages involved in heart failure patient self-care. Heart failure is marked by a fluctuating disease course, characterized by stable periods interspersed with occasional progressive deteriorations. Given these conditions, the researcher aims to elucidate patients' experiences during episodes of heart failure progression, particularly concerning selfcare practices.

This study aims to explore how heart failure patients adhere to self-care practices and the stages they

undergo following a heart failure diagnosis based on their experienced journey.

# **Materials and Methods**

## Research Design and Sampling Technique

This study employed a descriptive phenomenological (Speziale and Carpenter, 2011) approach to explore the meaning behind heart failure patients' experiences in conducting self-care practices at home. Ethical clearance for this research was obtained from the Research Ethics Commission of the Faculty of Medicine, Universitas Brawijaya, under protocol number 84/EC/KEPK/04/2022. Participants involved in this study were provided with explanations and signed written consent forms indicating their willingness to participate in the research. A total of 19 participants were selected using purposive sampling techniques for inclusion in this study. The inclusion criteria for participant recruitment encompassed heart failure patients in stage C, with New York Heart Association (NYHA) functional status of 2-3, diagnosed by a physician within the last year, and in stable condition (systolic blood pressure 100-140 mmHg, heart rate 60-100 beats per minute, absence of shortness of breath and chest pain, and no major arrhythmias). Participants were excluded from the study if they developed dementia or experienced deteriorating conditions requiring supportive or palliative therapy. Participant selection was carried out one by one, and analyzed until data saturation was achieved.

## Data Collection

Participants were provided with informed consent to engage in the research during their visit to the cardiac outpatient clinic. In-depth interviews were conducted face-to-face at agreed-upon locations, as arranged with each patient. These interviews with the participants were recorded using audio recorders and lasted between 18 to 66 minutes. Demographic data of the participants were also collected as per the research requirements through the use of a questionnaire. The primary researcher conducted the interviews after practicing with three heart failure patients beforehand. The researcher followed a guideline during the in-depth interviews, initiating with the question "After being diagnosed with heart failure, how do you manage to stay healthy at home?" This question was then followed by more specific inquiries regarding how they monitor symptoms, make decisions, and take action concerning the symptoms of heart failure they experience.

The trustworthiness of qualitative studies relates to credibility, dependability, transferability, confirmability(Graneheim, Lindgren and Lundman, 2017). Purposive sampling was employed to obtain a broad sample and fulfill the credibility aspect in describing patients' experiences of self-care at home. This sampling technique was chosen to seek heart failure patients who had relevant experiences for the study being conducted. To obtain valid data in this study, the researchers extended the time spent with participants. Interviews were conducted by the researchers on the second or third meeting with the participants. Additionally, detailed notes were taken by the researchers during the interview process with the participants. Furthermore, to prevent analysis from being influenced by prior understandings and to achieve reliability and confirmability, the authors (TS, SY) collectively discussed and reflected upon the codes and categories. Quotes are presented to enhance authenticity and achieve confirmability. Furthermore, readers can evaluate the quotes to follow the structured description and perceive the results written by researchers as an interconnected sequence.

## Data Analysis

All interview outcomes with the participants were repeatedly listened to and transcribed verbatim. The content analysis approach (Miles and Huberman, 1994; Lindgren, Lundman and Graneheim, 2020) was employed by the researchers (TS, SY) to identify subcategories, categories, and themes within this study. The researchers (TS, SY) meticulously read and reviewed the verbatim transcripts to pinpoint keywords reflecting efforts to maintain, monitor symptoms, and make

decisions or take actions in response to perceived symptoms. These keywords were marked, analyzed, and interpreted by the researchers (TS, SY). They were then scrutinized, and coded, eventually forming categories. The researchers (TS, SY) proceeded to select and group the identified categories, thus forming themes. These themes, once identified, were aligned according to the predetermined research objectives. Subsequently, the researchers (TS, SY) organized these themes within a coherent framework to elucidate the relationships among themes and establish the sequence of discovered themes.

## Results

A total of 19 heart failure patients were enrolled in the study. Their age ranged from 46 to 70 years old (mean=60.4 years), more than half of the participants were male (n=10), and most participants were married (n=14). Educational backgrounds varied among participants: over half of the participants were high school graduates (n=11) and college graduates (n=7). A significant portion of the participants (n=15) were either unemployed or retired. These participants had experienced heart failure within the last year, with the condition persisting for up to six years. The primary cause of heart failure among most participants (n=17) was coronary artery disease (CAD), while the remainder was due to heart valve abnormalities. More than half of the participants (n=11) experienced symptoms of shortness of breath during mild activity or NYHA III (table 1). The analysis revealed four major themes. The

Table I. Participant Characteristics (N=19)

ID	Sex	Age	Education	Marital status	Employment	Length of HF	Etiology & FC of HF
PI	F	47	BD	Married	Lecturer	3	CAD/NYHA III
P2	M	52	BD	Married	Lecturer	8	CAD/NYHA II
P3	М	54	HS	Married	Unemployment	3	CAD/NYHA III
P4	F	64	HS	Widow	Unemployment	6	CAD/NYHA III
P5	М	68	BD	Widower	Retiree	2	CAD/NYHA II
P6	М	52	HS	Married	Unemployment	3	CAD/NYHA III
P7	M	62	HS	Married	Retiree	6	CAD/NYHA II
P8	М	64	BD	Married	Retiree	1	CAD&HT/ NYHA II
P9	М	70	BD	Married	Retiree	6	CAD/NYHA II
PI0	М	70	HS	Married	Retiree	1	CAD/NYHA II
PII	M	61	HS	Married	Retiree	I	CAD&HT/ NYHA III
PI2	F	70	HS	Widow	Retiree	4	CAD/NYHA II
PI3	F	53	HS	Married	Unemployment	2	Valve abnormality/ NHYA
							III ·
PI4	F	70	MS	Married	Unemployment	6	HT/NYHA III
PI5	М	65	BD	Married	Shopkeeper	4	HT/NYHA II
PI6	М	46	HS	Married	Shopkeeper	3	Valve abnormality/ NHYA
							III
PI7	F	65	BD	Widow	Retiree	4	CAD/NYHA III
PI8	M	54	HS	Married	Unemployment	2	CAD/NYHA III
PI9	F	62	HS	Widow	Unemployment	3	CAD/NYHA III

ID (Identity); P1 (Participant 1); M (Male); F(Female); BD (Bachelor degree); HS (High school); MS (Middle school); PS (Primary School); HF (Heart Failure); FC of HF (Functional class of Heart Failure); CAD (coronary artery disease); HT (Hypertension): NYHA (New York Heart Association).

Table 2. Self-care practice in heart failure

Theme	Category		Subcategory		
Patients' perception of heart failure	Transitioning into a heart failure	I.	Denying and attempting to cope with		
diagnosis	patient		Non-adherence to heart failure medication		
		3.	Attempt to interpret the self-care practice		
	Recognizing the need for self-care	I.	The symptoms prompt participants to engage		
		2.	Compare their condition to others		
Efforts in self-care	Seeking information and heart failure	١.	Symptoms drive participants to seek treatment		
	therapy	2.	Seek valid information		
		3.	Disbelief in alternative therapy		
	Facilitators and barriers in seeking	I.	Utilize the internet to gather information		
	information regarding self-care	2.	Limited interaction between doctors and participants		
Readiness for self-care	Social support and belief in engaging in	١.	Require reinforcement and support		
	self-care at home	2.	Faith in the treatment program		
	Self-confidence in engaging in self-care	Ι.	Can manage their heart failure symptoms		
	at home	2.	Confident in the self-care actions		
Adoption of new healthy behaviors as	Efforts to develop self-care strategies	Ι.	Strive to develop individual strategies		
heart failure patients		2.	Devise methods to conduct self-care		
	Engaging in new healthy behaviors as	Ι.	Actively take on the role		
	heart failure patients independently	2.	Self-care becomes the daily lifestyle pattern		

content within these themes was formulated into eight categories and eighteen subcategories (<u>Table 2</u>).

Theme I: Patients' perception of heart failure diagnosis

The journey of self-care treatment for heart failure patients began with how the patients perceived their heart failure diagnosis. This theme was supported by two subcategories transitioning into a heart failure patient and recognizing the need of self-care.

Category 1: Transitioning into a heart failure patient (subcategories; denying and attempting to cope with, non-adherence to heart failure medication and attempt to interpret the self-care practice)

The initial reaction of participants upon experiencing heart failure is denial and attempting to cope with life while grappling with the condition. Participants also frequently exhibited non-compliance with the programmed therapy, especially when their condition was stable. Participants attempted to make sense of the heart failure condition they experienced.

"I'm still young, only 46 years old, and yet I have heart failure? But what can I do? I must keep living and stay healthy for the sake of my child. I have to endure for my child." (P16, HF NYHA III, Valve Abnormality).

"When I feel good, I tend to neglect taking my medication. I even want to eliminate them one by one without consulting the doctor. But the illness turns out to be stronger." (P2, HF NYHA II, CAD)

"To be healthy, first, you have to seek treatment when ill, second, you must adhere to the doctor's instructions, and third, you have to strive for your health." (P8, HF NYHA II, CAD)

Category 2: Recognizing the need for self-care (subcategories; the symptoms prompt participants to engage and compare their condition to others).

Participants realized the necessity of engaging in self-care due to the cardiac symptoms they experienced. The presence of perceived symptoms triggered participants to engage in self-care, particularly medication use. Additionally, participants attempted to compare the outcomes of their self-care with those of other cardiac patients.

"Previously, even a little activity made me tired, but now, not if I take my medication regularly. My heart used to beat rapidly all the time... But after taking the medication regularly, it doesn't happen anymore." (P16, HF NYHA III, Valve Abnormality)

"I compare myself to others who have the same illness as mine. My neighbor, for instance, has a stent. The difference when walking... It is remarkably different. The proof is, they still struggle with shortness of breath while walking, but I don't anymore." (P18, HF NYHA III, CAD)

#### Theme 2: Efforts in self-care

Participants endeavored to conduct self-care by seeking information about their heart failure condition and its treatment. Throughout this process, factors supporting and hindering it were identified. The categories that support this theme were seeking information and heart failure therapy and facilitators and barriers in seeking information regarding self-care.

Category 3: Seeking information and heart failure therapy (subcategories; symptoms drive participants to seek

Suharsono, Ulya, Yona, and Siswanto (2024)

treatment, seek valid information, and disbelief in alternative therapy).

The presence of heart failure symptoms drives participants to seek treatment from healthcare facilities and place trust in healthcare providers. Participants also sought valid information from healthcare professionals to regain health despite having experienced heart failure. Additionally, participants did not believe in alternative treatment practices conducted by non-healthcare professionals.

"Whoever handles me here, the important thing is I ask for healing, not to stay ill, so that I won't swell again." (P18, HF NYHA III, CAD)

"Doctor, besides taking medication, what else can speed up recovery? I want to return to normal, to be able to be active and work again." (P18, HF NYHA III, CAD)

"After I followed my desire for alternative treatments, instead of getting better, it worsened, to the point where I wished for death. Up until now, I don't listen to everything people say, it's all lies." (P18, HF NYHA III, CAD)

"I started from my first examination until now, I believe in the doctor. Because the doctor has the knowledge and the data." (P8, HF NYHA II, CAD)

Category 4: Facilitators and barriers in seeking information regarding self-care (subcategories; utilize the internet to gather information and limited interaction between doctors and participants).

Participants utilized technological advancements, such as the presence of the internet, to guide them in self-care at home. The obstacles encountered by participants in searching for information related to self-care were the limited interaction time between doctors and patients.

"Nowadays, we just have to open Google, right? Moreover, there are people far away that we can call, email, ask them. From there, we can learn, inquire about information, about how my illness is." (P9, HF NYHA II, CAD).

"At check-ups, they don't say anything, just ask if I feel better. Then they check my blood pressure, give me medication, and send me home." (P10, HF NYHA II, CAD & HT).

"I met the doctor twice during check-ups, never talked, just wrote a prescription, checked, and then sent me home. I tried to consult once, but the doctor seemed too busy, in a rush." (P11, HF NYHA III, CAD & HT).

Theme 3: Readiness for self-care

The readiness of participants to engage in self-care can be realized through social support from the patient's surroundings and belief in the outcomes of self-care practices. Patients needed to consistently carry out self-care routines and experience positive benefits, which reinforced their confidence in maintaining stable bodily conditions through self-care. This theme is supported by two categories, namely social support and belief in engaging in self-care at home and self-confidence in engaging in self-care at home.

Category 5: Social support and belief in engaging in self-care at home (subcategories; require reinforcement and support, and faith in the treatment program).

Participants needed reinforcement and support to continue engaging in self-care. Moreover, participants had to believe that the self-care program they were undertaking would yield positive effects on their congestive heart failure condition.

"When my mother is around, she's the one who usually reminds me to take my medication. She's diligent in reminding me to take my medication." (P16, HF NYHA III, Valve Abnormality).

"I don't feel anything, sir, just normal. No shortness of breath or swelling. I'm much better now. I believe that by regularly taking medication, monthly check-ups, and continuous monitoring by the doctor, I become healthier." (P4, HF NYHA III, CAD).

"My condition has greatly improved, no shortness of breath, no swelling. If it is checked again later, God willing, my heart will not even be swollen anymore, maybe just some scars. God willing, it will be like that." (P8, HF NYHA II, CAD).

Category 6: Self-confidence in engaging in self-care at home (subcategories; can manage their heart failure symptoms and confident in the self-care actions).

Participants' self-confidence was acquired after gaining experience in performing self-care that effectively controlled symptoms of heart failure. The outcomes and experiences of self-care formed confidence within the patient to continue practicing self-care.

"Before, I used to carry my grandchild, but now I limit myself. If I feel tired, I just rest." (P4, HF NYHA III, CAD).

"Now, I'm just normal, like a regular person. But I am reminded by the doctor not to do heavy work, when working, if I am tired, just stop. Leave it, continue tomorrow. Until now, I've been doing that consciously." (P18, HF NYHA III, CAD)

Theme 4: Adoption of New Healthy Behaviors as Heart Failure Patients

Participants endeavored to develop individualized self-care strategies according to their respective needs and conditions. Upon finding them suitable and experiencing their benefits, participants would adopt them as new healthy behaviors as heart failure patients. The adoption of new healthy behaviors was supported by two categories, namely; efforts to develop self-care strategies and engaging in new healthy behaviors as heart failure patients independently.

Category 7: Efforts to develop self-care strategies (subcategories; strive to develop individual strategies and devise methods to conduct self-care)

Participants developed individual strategies according to the conditions and abilities they possessed to support the success of self-care implementation at home. Participants also utilized available equipment and technology to support more effective implementation of self-care. Participants used the alarm on their mobile phones as reminders for hospital appointments and scheduling medication intake.

"I never take the medication that makes me urinate on Fridays; otherwise, I might not be able to go to the mosque. I only take it after returning from the mosque." (P11, HF NYHA III, CAD & HT).

"I use an alarm clock, so my phone must always be near me. I carry my phone everywhere I go, even while working at home. I always have it with me so. I will not forget to take the medication. I write down my check-up schedule on the calendar at home, so I won't forget about it." (P16, HF NYHA III, Valve Abnormality).

Category 8: Engaging in new healthy behaviors as heart failure patients independently (subcategories; actively take on the role and self-care becomes the daily lifestyle pattern).

Participants actively assumed the role to continuously maintain their condition stable despite experiencing heart failure. This new role gradually formed a new healthy behavior as heart failure patients. This condition became the goal of self-care to adapt to their new role as heart failure patients.

"If I go somewhere, I always bring my medication. My bag always contains medicine. So, if it's time to take medication, I can do it." (P10, HF NYHA II, CAD).

"Now, I consistently take my medication, it's part of my effort. I also participate in neighborhood exercise sessions. So, I have a routine agenda every day, a set routine agenda. Do not dwell on it, do not let the disease consume your thoughts. They say a second attack could be fatal. This is the best for me right now." (P17, HF NYHA III, CAD)

#### **Discussions**

Theme I: Patients' perception of heart failure diagnosis

Being diagnosed with heart failure is a severe and challenging condition for patients. The first theme identified in this qualitative study is "Patients' perception of heart failure diagnosis," which includes "Transitioning into a heart failure patient" and "Recognizing the need for self-care." The interview results depicted the condition of patients newly diagnosed with heart failure, where they often denied and disregarded the self-care recommendations provided. Previous studies (Fry et al., 2016b; Son, Lee and Kim, 2019; Nordfonn, Morken and Lunde Husebø, 2020)have shown similar results where participants denied their heart failure condition as a form of coping mechanism. The presence of severe, disruptive, and fluctuating symptoms of heart failure made participants realize the need for adjustment and self-care. The presence of these heart failure symptoms could serve as motivation for patients to feel compelled to engage in self-care (Riegel et al., 2019; Riegel et al., 2021).

As one of the healthcare professionals responsible for preparing patients for self-care at home, nurses need to conduct assessments to evaluate patients' perspectives on their experienced heart failure condition. This point is crucial as it forms the basis for patients to continue the self-care process at home. Misconceptions about their heart failure condition would result in the failure of self-care implementation at home and trigger readmission for patients. Nurses are responsible for shaping patients' accurate perceptions of their experienced heart failure.

#### Theme 2: Efforts in self-care

The second theme identified in this qualitative study was "Efforts in self-care," which comprised two categories: "Seeking information and heart failure therapy" and "Facilitators and barriers in seeking information regarding self-care." This theme depicted the efforts made by heart failure patients to seek valid information about their condition. It also discussed the conditions that supported and hindered patients' information-seeking activities. Previous studies (Koirala et al., 2018) have shown that the presence of perceived heart failure symptoms in patients is a strong predictor of patients engaging in self-care. A good understanding of the condition through increased literacy about heart failure medication has been proven effective in

improving medication adherence. The qualitative study conducted by Sedlar, Lainscak and Farkas (2020) showed similar findings to this study regarding the lack of collaboration between healthcare professionals and patients.

The involvement of professional healthcare personnel is crucial in facilitating patients' efforts toward self-care. Nurses are obligated to provide valid information sources that can serve as a guide for patients to carry out self-care at home. Therefore, nurses need to assess patients' knowledge and understanding of their heart failure condition before they are discharged from the hospital. A good understanding and knowledge from patients should ideally be one of the indicators for discharging patients from the hospital.

#### Theme 3: Readiness for self-care

The third theme, "readiness for self-care," comprised of two categories: "social support and belief in engaging in self-care at home" and "self-confidence in engaging in self-care at home," demonstrates one's confidence in initiating self-care at home. Achieving patient readiness for self-care necessitates support from individuals surrounding the patient, such as family members who will play a role as family caregivers. Support from family, professional healthcare personnel, and friends is crucial in shaping the patient's selfconfidence in commencing self-care at home. The confidence of heart failure patients acts as a mediating factor in the formation of self-care maintenance and management (Jiang et al., 2023). Social support exhibits a significant association with self-care confidence in heart failure patients (Fivecoat, Sayers and Riegel, 2018) and positively correlates with self-care confidence and self-care behaviors, as demonstrated consistently in the research (Graven and Grant, 2014; Vellone et al., 2015;2016; Koirala et al., 2020; Massouh et al., 2020).

Fatigue and shortness of breath resulting from symptoms of heart failure makes patients have difficulty performing self-care efforts without assistance from caregivers. Nurses need to identify the presence of caregivers around the patient to help continue self-care after returning home. Moreover, nurses also need to assess the patients' self-confidence in continuing the care program at home. The self-care program for heart failure patients should not only involve the patients themselves but also their families as caregivers. This needs to be done to ensure the continuation of the patient care program after returning home.

Theme 4: Adoption of new healthy behaviors as heart failure patients

The fourth theme identified from this interview is the "adoption of new healthy behaviors as heart failure patients," which was formed from two categories: "efforts to develop self-care strategies" and "engaging in new healthy behaviors as heart failure patients independently" as the expected output from patients engaging in self-care for heart failure. The patients began to develop independent strategies according to their needs to continue their self-care in line with their condition. Heart failure patients exhibited better self-management when they were activated, regardless of their literacy or knowledge about their condition (Jacobson et al., 2018).

Heart failure patients require adaptation and formation of new healthy behaviors to maintain stability. They must take medication for the rest of their lives and change behaviors to stay healthy. Nurses need to assist patients in identifying individual strategies and reinforcing new healthy behaviors as heart failure patients. This is necessary to ensure the formation of new healthy behaviors as heart failure patients

The findings of this research offer practical insights into understanding the process of developing self-care behaviors as part of the transition toward new healthy behaviors among heart failure patients. The phenomenon depicted in this research enriches nurses' understanding in supporting the implementation of self-care at home. One limitation of this research is that the data may not encompass all aspects of the experiences related to self-care among heart failure patients. The participants were drawn from a single hospital in Malang City, which could be a limitation due to variations in the availability of educational resources across different hospitals.

#### Conclusion

The findings of this research emphasize the crucial role of patient acceptance regarding their heart failure condition to initiate the self-care process. Based on these findings, patients should obtain information from healthcare professionals or other reliable sources. The themes highlighted in this study underscore the significance of support for patients, particularly from professional healthcare providers, in facilitating self-care. These research findings can contribute to the development of tailored self-care programs to improve outcomes for heart failure patients, especially in Indonesia.

## **Funding**

The research was funded by the Research and Community Service Development Agency, Faculty of Health Sciences, Universitas Brawijaya.

#### Conflict of interest

The authors declare no conflict of interest.

## **Acknowledgments**

The author expresses sincere gratitude to Prof. Dr. dr. Djanggan Sargowo, Sp.PD, SPJP(K) FIHA and Ns Rara Prastika for their assistance in selecting and recruiting participants for this study. The author extends gratitude to the administrative staff and patients at the Cardiology Polyclinic of Brawijaya University Hospital who participated in and supported this research.

#### References

- Agarwal, M. A., Fonarow, G. C. and Ziaeian, B. (2021a) 'National Trends in Heart Failure Hospitalizations and Readmissions from 2010 to 2017', JAMA Cardiology, 6(8), pp. 952-956. 10.1001/jamacardio.2020.7472.
- Agarwal, M. A., Fonarow, G. C. and Ziaeian, B. (2021b) 'National Trends in Heart Failure Hospitalizations and Readmissions from 2010 to 2017', JAMA Cardiology, 6(8), pp. 952–956. 10.1001/jamacardio.2020.7472.
- Attaallah, S., Klymko, K. and Hopp, F. P. (2016) 'Self-Care Among Older Adults With Heart Failure', Gerontology and Geriatric Medicine, 2, p. 233372141668401. doi: 10.1177/2333721416684013.
- Chae, S. et al. (2022) 'Factors associated with poor self-management documented in home health care narrative notes for patients with heart failure', Heart and Lung, 55, pp. 148-154. doi: 10.1016/j.hrtlng.2022.05.004.
- Chamberlain, L. (2017) 'Perceived social support and self-care in patients hospitalized with heart failure', European Journal of Cardiovascular Nursing, 16(8), pp. 753-761. 10.1177/1474515117715842.
- Farmer, S. A. et al. (2016) 'Patient, Caregiver, and Physician Work in Heart Failure Disease Management: A Qualitative Study of Issues That Undermine Wellness', Mayo Clinic Proceedings, 91(8), pp. 1056-1065. doi: 10.1016/j.mayocp.2016.05.016.
- Fivecoat, H. C., Sayers, S. L. and Riegel, B. (2018) 'Social support predicts self-care confidence in patients with heart failure', European Journal of Cardiovascular Nursing, 17(7), pp. 598–604. doi: 10.1177/1474515118762800.
- Fry, M. et al. (2016a) 'The implications of living with heart failure; The impact on everyday life, family support, co-morbidities and access to healthcare: A secondary qualitative analysis', BMC Family Practice, 17(1). doi: 10.1186/s12875-016-0537-5.
- Fry, M. et al. (2016b) 'The implications of living with heart failure; The impact on everyday life, family support, co-morbidities and access to healthcare: A secondary qualitative analysis', BMC Family Practice, 17(1). doi: 10.1186/s12875-016-0537-5.
- Graneheim, U. H., Lindgren, B.-M. and Lundman, B. (2017) 'Methodological challenges in qualitative content analysis: A discussion paper', Nurse Education Today, 56, pp. 29-34. doi: 10.1016/j.nedt.2017.06.002.
- Graven, L. J. and Grant, J. S. (2014) 'Social support and self-care behaviors in individuals with heart failure: An integrative review', International Journal of Nursing Studies, pp. 320-333. doi: 10.1016/j.ijnurstu.2013.06.013.

- Hashimoto, S. et al. (2023) 'Confidence in self-care after heart failure hospitalization', Journal of Cardiology, 81(1), pp. 42-48. doi: 10.1016/j.jjcc.2022.10.001.
- Jaarsma, T. et al. (2013) 'Comparison of self-care behaviors of heart failure patients in 15 countries worldwide', Patient Education and Counseling, 92(1), pp. 114–120. doi: 10.1016/j.pec.2013.02.017.
- Jaarsma, T. et al. (2017) 'Factors Related to Self-Care in Heart Failure Patients According to the Middle-Range Theory of Self-Care of Chronic Illness: a Literature Update', Current Heart Failure Reports. Current Science Inc., pp. 71-77. doi: 10.1007/s11897-017-0324-1.
- Jaarsma, T. et al. (2020) 'Status of theory use in self-care research', International Journal of Environmental Research and Public Health. MDPI AG, pp. 1-13. doi: 10.3390/ijerph17249480.
- Jacobson, A. F. et al. (2018) 'Patient activation, knowledge, and health literacy association with self-management behaviors in persons with heart failure', Heart and Lung, 47(5), pp. 447-451. doi: 10.1016/i.hrtlng.2018.05.021.
- Jiang, Y. et al. (2023) 'Relationships of person-related, problemrelated, and environment-related factors to self-care behaviours and the mediating role of self-confidence among patients with heart failure: Cross-sectional analysis of structural equation modelling', International Journal of Nursing Studies, 147. doi: 10.1016/j.ijnurstu.2023.104590.
- Jiang, Y. and Wang, W. (2021) 'Health promotion and selfmanagement among patients with chronic heart failure', in Health Promotion in Health Care - Vital Theories and Research. Springer International Publishing, pp. 269-285. doi: 10.1007/978-3-030-63135-2 19.
- Kessing, D. et al. (2017) 'Self-care and health-related quality of life in chronic heart failure: A longitudinal analysis', European Journal of Cardiovascular Nursing, 16(7), pp. 605-613. 10.1177/1474515117702021.
- Kim, H. and Cho, M. K. (2021) 'Factors influencing self-care behavior and treatment adherence in hemodialysis patients', International Journal of Environmental Research and Public Health, 18(24). doi: 10.3390/ijerph182412934.
- Koirala, B. et al. (2018) 'Factors affecting heart failure self-care: An integrative review', Heart and Lung. Mosby Inc., pp. 539-545. doi: 10.1016/j.hrtlng.2018.09.004.
- Koirala, B. et al. (2020) 'Heart failure self-care, factors influencing selfcare and the relationship with health-related quality of life: A cross-sectional observational study', Heliyon, 6(2). doi: 10.1016/j.heliyon.2020.e03412.
- Lam, C. S. P. et al. (2016) 'Regional and ethnic differences among patients with heart failure in Asia: The Asian sudden cardiac death in heart failure registry', European Heart Journal, 37(41), pp. 3141–3153. doi: 10.1093/eurheartj/ehw331.
- Lindgren, B. M., Lundman, B. and Graneheim, U. H. (2020) 'Abstraction and interpretation during the qualitative content analysis process', International Journal of Nursing Studies. Elsevier Ltd. doi: 10.1016/j.ijnurstu.2020.103632.
- MacDonald, M. R. et al. (2020) 'Regional Variation of Mortality in Heart Failure With Reduced and Preserved Ejection Fraction Across Asia: Outcomes in the ASIAN-HF Registry', Journal of the American Heart Association, 9(1). doi: 10.1161/JAHA.119.012199.
- Massouh, A. et al. (2020) 'Self-care confidence mediates self-care maintenance and management in patients with heart failure', and 49(1), 30-35. Lung, pp. 10.1016/j.hrtlng.2019.07.008.
- Miles, M. and Huberman, A. (1994) Qualitative Data Analysis: An Expanded Sourcebook. 2nd Ed. Thousand Oaks, CA, USA: Sage Publications.
- Nordfonn, O. K., Morken, I. M. and Lunde Husebø, A. M. (2020) 'A qualitative study of living with the burden from heart failure treatment: Exploring the patient capacity for self-care', Nursing Open, 7(3), pp. 804–813. doi: 10.1002/nop2.455.
- Patrick, M. et al. (2022) 'Anxiety and depression moderate the relationship between quality of life and self-care in patients with

- heart failure', *Geriatric Nursing*, 44, pp. 54–59. doi: 10.1016/j.gerinurse.2021.12.020.
- Reyes, E. B. et al. (2016) 'Heart failure across Asia: Same healthcare burden but differences in organization of care', International Journal of Cardiology. Elsevier Ireland Ltd, pp. 163–167. doi: 10.1016/j.ijcard.2016.07.256.
- Riegel, B. et al. (2019) 'Integrating symptoms into the middle-range theory of self-care of chronic illness', Advances in Nursing Science. Lippincott Williams and Wilkins, pp. 206–215. doi: 10.1097/ANS.0000000000000237.
- Riegel, B et al. (2021) Integrating Symptoms Into the Middle-Range Theory of Self-Care of Chronic Illness, Editorial / International Journal of Nursing Studies.
- Riegel, Barbara et al. (2021) 'Self-care research: Where are we now? Where are we going?', International Journal of Nursing Studies, 116. doi: 10.1016/j.ijnurstu.2019.103402.
- Riegel, B., Dickson, V. V. and Faulkner, K. M. (2016) 'The situation-specific theory of heart failure self-care revised and updated', Journal of Cardiovascular Nursing, 31(3), pp. 226–235. doi: 10.1097/JCN.00000000000000244.
- Savarese, G. et al. (2023) 'Global burden of heart failure: a comprehensive and updated review of epidemiology', Cardiovascular research. NLM (Medline), pp. 3272–3287. doi: 10.1093/cvr/cvac013.

- Sedlar, N., Lainscak, M. and Farkas, J. (2020) 'Living with chronic heart failure: Exploring patient, informal caregiver, and healthcare professional perceptions', International Journal of Environmental Research and Public Health, 17(8). doi: 10.3390/ijerph17082666.
- Son, Y. J., Lee, Y. M. and Kim, E. Y. (2019) 'How do patients develop self-care behaviors to live well with heart failure?: A focus group interview study', *Collegian*, 26(4), pp. 448–456. doi: 10.1016/j.colegn.2018.12.004.
- Speziale, H. Streubert. and Carpenter, D. Rinaldi. (2011) *Qualitative* research in nursing: advancing the humanistic imperative. Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Su, H. et al. (2023) 'The Lived Experience of Frailty in Patients Aged 60 Years and Older with Heart Failure: A Qualitative Study', Asian Nursing Research, 17(4), pp. 191–199. doi: 10.1016/j.anr.2023.07.002.
- Vellone, E. et al. (2015) 'Self-care confidence may be the key: A cross-sectional study on the association between cognition and self-care behaviors in adults with heart failure', International Journal of Nursing Studies, 52(11), pp. 1705–1713. doi: 10.1016/j.ijnurstu.2015.06.013.
- Vellone, E. et al. (2016) 'Self-care confidence may be more important than cognition to influence self-care behaviors in adults with heart failure: Testing a mediation model', International Journal of Nursing Studies, 60, pp. 191–199. doi: 10.1016/j.ijnurstu.2016.04.016.
- White, M. F., Kirschner, J. and Hamilton, M. A. (2014) 'Self-care guide for the heart failure patient', *Circulation*, 129(3). doi: 10.1161/CIRCULATIONAHA.113.003991.

**How to cite this article:** Suharsono, T., Ulya, I., Yona, S., and Siswanto, B. B. (2024) 'Initiation of self-care practices in heart failure patients: a phenomenological study', *Jurnal Ners*, 19(2), pp. 222-230. doi: http://dx.doi.org/10.20473/jn.v19i2.54096

230 P-ISSN: 1858-3598 • E-ISSN: 2502-5791