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ORIGINAL RESEARCH

Experiences of Patients with Heart Failure in Transition from Hospital to Home in China: A Qualitative Study

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Objective: To explore the transitional care experiences of patients with heart failure (HF) in China, identifying the challenges they face and their needs during the transition from hospital to home.

Methods: A qualitative approach was employed, recruiting 18 participants from a tertiary hospital cardiology department between June and October 2023. Data were collected through semi-structured interviews and analysed using thematic analysis.

Results: Among the participants, 83% (15/18) reported feeling inadequately prepared for self-monitoring, with rural patients facing additional difficulties; 67% (12/18) relied on unverified online resources for health information, and 78% (14/18) surrendered medication management to family members. Finally, 89% (16/18) expressed a need for extended hospital guidance, with rural participants highlighting financial difficulty as a significant concern.

Conclusion: The study concludes that there is an urgent need for transitional care reform in China, including standardised discharge protocols, hospital-led telehealth platforms and government-subsidised rehabilitation programmes. These interventions should address urban–rural disparities and reduce caregiver dependency to improve the quality of life for patients with HF during the transition from hospital to home.

Keywords: heart failure, transitional care, patient-centred care, health service accessibility, self-care

Introduction

Heart failure (HF) is a significant global health problem with substantial morbidity and mortality, affecting an estimated 26 million people worldwide.[1] Due to its high readmission rates, poor prognosis, increasing frequency with an aging population and the rising prevalence of lifestyle risk factors, HF has become a major challenge in developed countries.[2] In Asian countries, HF prevalence ranges from 1.3% to 6.7%.[3] With its unique healthcare system, China faces a comparable HF prevalence rate of 1.2%–2.2%.[4–7] The economic burden is significant, with 70–80% of HF treatment costs in wealthy nations borne by healthcare systems.[8] In China, the average cost per capita for inpatients with HF is $4406, and 40.5% of inpatients require three hospitalisations.[7]

Despite advancements in medical tools and medications, HF management remains challenging for healthcare professionals. Among the various strategies, transitional care interventions are the most innovative programmes aimed at improving continuity of care from admission to post-discharge.[9,10] Transitional care refers to the steps taken during clinical interactions to ensure coordination and continuity of treatment for patients transitioning between facilities or care levels. However, inadequate planning, insufficient patient/family education and fragmented access to essential services contribute to disparities in the hospital-to-home transition.[11,12] These disparities are often exacerbated by limited financial resources, insurance coverage and social support.

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In the transition stage from hospital to home following discharge for patients with HF, the coordination of subsequent care is crucial. This is closely related to the compliance challenges faced by patients in various aspects, such as medication treatment, diet control, exercise adherence and psychosocial adaptation. Such patients generally need to visit the emergency department more frequently and be hospitalised multiple times and for longer periods, and these situations often interact with and reinforce each other in relation to the above-mentioned compliance issues. It is worth noting that 50% of patients with HF will be readmitted within 1 year after discharge, and 20% of patients will even experience two or more readmissions. In-depth analysis of the reasons for readmission reveals that, in addition to symptom deterioration and disease progression, self-care compliance problems – such as poor medication adherence (eg missed or incorrect dosing), lax diet management (eg excessive sodium intake) and interrupted exercise plans – as well as psychosocial factors such as anxiety, depression or insufficient social support, and patients' lack of awareness of when and how to seek help from medical staff are all important contributing factors. Imperfect discharge planning will further exacerbate these compliance problems, thereby causing pain and anxiety for patients.[13] This will increase the risk of adverse events and medication errors, leading to a continuous decline in treatment compliance, including medication, diet and exercise, and ultimately reducing the quality of life of patients.[14] Therefore, to achieve a smooth transition from hospital to home, it is necessary to specifically address the practical difficulties of patients with HF in aspects such as medication treatment norms, diet structure adjustment and exercise plan implementation while paying attention to their psychological and mental needs. Practice has shown that transitional care plans can effectively improve the quality of life of patients and reduce the readmission and all-cause mortality rates following hospitalisation of patients with HF by optimising the intervention measures related to the above aspects.[9]

The transition period is a critical phase in HF management, requiring collaboration among individuals with diverse backgrounds, experiences and abilities. While transitional nursing models have improved overseas, research in China remains fragmented, with no unified descriptions or conclusions.[15] In China, hospital-to-home transitional care typically includes pre-discharge oral health education, post-discharge telephone follow-up and home visits by family physicians and transition nurses upon request. However, the lack of a unified implementation plan, evaluation standards and training for key personnel has resulted in significant variations and disparate research outcomes. Transitional care strategies are influenced by medical resources and cultural differences, necessitating localised policy formulation combined with standardisation. Prior research has not adequately described how Chinese patients with HF perceive care transitions. Understanding patients' experiences and perceptions is essential to identifying gaps and optimising the transition process, ultimately improving patients' quality of life.

This study examines the difficulties and obstacles patients with HF face during the transition to self-care, exploring their needs and challenges to inform the development of targeted health interventions.

Methods

This qualitative study employed a phenomenological approach to explore the transitional care experiences of patients with HF in China. The study was conducted between June 2023 and October 2023 at a tertiary hospital's cardiology department.

Participants were recruited using purposive sampling to ensure diversity in age, gender and urban/rural residence. The inclusion criteria included (1) confirmed diagnosis of HF (NYHA Class II–IV); (2) discharged from the hospital within the past 3 months; and (3) ability to communicate in Mandarin. The exclusion criteria included severe cognitive impairment or terminal illness. Based on the method of "theoretical saturation", we continuously recruited volunteers before thematic saturation was reached. When we interviewed the 15th and 16th volunteers, we found that the difficulties, ideas and needs mentioned by the newly arrived patients were essentially the same as those of the previous patients, and no new information was introduced. The final sample, therefore, comprised 18 participants.

Data were collected through semi-structured, face-to-face interviews conducted in a private hospital room. The interview guide was developed based on a literature review and pilot-tested with three patients with HF (not included in the final sample). Key topics included challenges during the hospital-to-home transition, self-care practices and knowledge gaps, and perceived support needs and barriers. The interviews lasted 30–60 minutes and were audio-recorded and transcribed verbatim within 48 hours. Field notes were taken to capture non-verbal cues and contextual details.

Transcripts were analysed using Braun and Clarke's six-step thematic analysis framework. The process began with familiarisation through repeated reading of transcripts to identify initial patterns. Initial coding was performed line-by-line using NVivo 12 software, followed by grouping codes into potential themes based on shared meaning. Themes were refined through iterative discussions among the research team, clearly defined and named, and finally used to select illustrative quotes and draft the results.

To ensure methodological rigor, several strategies were employed. Two researchers independently coded 20% of the transcripts, achieving a kappa value of 0.82, indicating excellent inter-coder agreement. Discrepancies were resolved through discussion and consensus. Preliminary findings were shared with five participants for member checking to confirm accuracy and relevance. Data were cross-verified with field notes and hospital discharge records for triangulation. The research team maintained a reflective journal to document biases and assumptions throughout the study.

Most of the patients were taking diuretics. Some patients with other comorbidities were also taking other medications, such as antihypertensive drugs and antidiabetic drugs. All patients were treated and cared for in the same hospital ward, meaning they received the same care. No complications occurred during hospitalisation. There was no follow-up intervention following discharge.

The study was approved by the hospital's ethics committee. Written informed consent was obtained from all participants, who were assured of confidentiality and the right to withdraw at any time.

Results

Through qualitative analysis, three themes were identified: 1) challenges faced (seeing in Table 1); 2) deficits in self-care during the transition (seeing in Table 2); and 3) the desire for help and support (seeing in Table 3).

Challenges Faced

Transition Difficulties

When participants discussed the impact of HF on their lives, most stated that the disease resulted in additional tasks. At the same time, significant changes emerged, both emotionally and in daily life. The sudden transition from hospital to home led to a certain amount of stress:

> Actually, I didn't exactly know about HF, I only had a cold before. After I got HF and had the symptoms, I didn't know how to take care of myself. I really didn't know this disease. I have no idea how to treat it. (P15)

> I don't know this disease as well. I sometimes have the impression of not being able to place the exact location of the discomfort in my body. I live in a rural area where there are few medical resources. I must go to the city to see the doctor. It's really inconvenient for me. (P7)

Some of those interviewed stated that these new changes included the body's current state and whether they could cope with self-care challenges. The transition from being healthy to being seriously ill had a substantial psychological impact on them:

> When I got this disease, I felt really tired after I did the cleaning at home. I really hate that, it made me feel I'm useless. (P10)

> Even though I did the treatment and felt better, it still cannot be compared with before. That made me feel like I'm no longer a normal person. (P4)

Overall, HF was a disease that sapped their energy. Some participants stated that they could formerly accomplish everything but now carefully manage their time and energy usage. They complete various activities with lower physical fitness, meaning the time spent with family and friends is shortened. Due to their diseases, the participants had to slow down their pace of life to adapt to new life situations:

> Before, I could take a walk or dance after I finished dinner, but now these activities make me feel tired. Like before I could walk for around half an hour or an hour, now when I walk around 20 steps or less, I need to have a break and take a breath. You know… Like if you cannot walk for a long time, how do you expect you can dance like before? (P10)

Table 1 Post Admission Challenges

Theme	Category	Statement
1. Post Admission Challenges	**(1a) A difficult transition**.	**P15, 56, Female** "Actually, I didn't exactly know about HF. I only had a cold before. After I got the HF and had the symptoms, I didn't know how to take care of myself. I really didn't know this disease. I have no idea how to treat it".
		P7, 75, Male "I do not know this disease as well. I sometimes have the impression of being unable to place the exact location of the discomfort in my body. I lived in a rural area where there were few medical resources. I must go to the city to see the doctor. It's really inconvenient for me". "The main problem is my blood sugar level and blood pressure are hard to control. Also, every time I went to the hospital, the different doctors gave me different suggestions about how to use the medicines. It makes me feel confused".
		P10, 55, Female "When I got this disease, I felt really tired after I did the cleaning at home. I really hate that; it makes me feel I am useless". "Before, I could take a walk or dance after I finished dinner, but now these activities make me feel tired. Like before, I can walk for around half an hour or an hour; now, when I walk around twenty steps or less, I need to have a break and take a breath. You know… Like if you cannot walk for a long time, how do you expect you can dance like before?"
		P4, 70, Male "Even though I did the treatment and feel better, it still cannot be compared to before. That made me feel like I am no longer a normal person".
		P3, 67, Female "After I got this disease, to be honest, I cannot walk too far away, my leg muscle became weak than before, and they cannot support me for a longer time to do the labor on the farm. So, I have to give up my career due to that reason".
		P14, 44, Male "I used to be able to plant 20 acres of land by myself, but now I can't do it anymore. Now, my wife is farming. The main reason for the decrease in activity is my physical problems".
		P5, 30, Female "Maybe… I will face more problems when I return to my work. The workplace is unlike home, where I can eat regularly and healthily. There may not be a canteen in the workplace, so I must go out to eat every day. I'd like to know how my blood sugar will fluctuate if my diet changes".
	(1b) Paying attention to my body signals.	**P1, 47, Male** "I don't monitor my blood pressure regularly. I only measure it when I feel uncomfortable".
		P14, 44, Male "As for my intake and output, I generally don't drink water when I'm not thirsty, and I will drink some water if I'm sweating in hot weather. I will take two pills if I feel uncomfortable and have chest tightness".
		P2, 58, Male "I care about only my heart rate and BP. Measure (blood pressure) whenever I feel sick".
		P11, 61, Female "I measure (blood pressure) 4 times daily and take a notebook to write down the number. Because it is hard to remember all the data. Usually, the BP is the highest in the morning of the day. Moreover, I pay more attention to my input and output. For example, if I drink three cups of water all day, I know I can excrete how much. The doctor told me I must excrete as much water as I drink. So… I usually pay more attention to my intake and output".
	(1c) Physical and Social Limitations	**P9, 48, Male** "I didn't have any scruples before I got sick, but now I didn't go out frequently. I don't go to drinking and smoking occasions anymore".
		P4, 70, Male "I used to be very social but no longer enjoy talking. This has changed dramatically. I no longer enjoy communicating with my family. I'm starting to notice that I don't want to talk as much as I used to". "In fact, my heart is not under any strain. My family will accompany me, and they will also find my friends to converse with me, but they do not wish to converse. They appear to be unable to stop themselves… Then my mental state improved significantly, but I did not want to talk".
		P5, 30, Female "I do not want to go out as long as I am sick. (Before I got sick) I preferred to spend my time outside. My body is tired now, and I get tired easily when walking". "I do not want to participate in social activities anymore. I am not interested in going out to eat with friends. I cannot eat well just sitting there because I get hot. Going out less often. When I am at home, I like to be alone and play mobile phone games".
		P14, 44, Male "I do not want to go outside or see anyone. I am just annoyed and depressed. You were upset mentally because you were not feeling well physically. (Your physical condition) is much better now, and you are getting stronger by the day. My mood will improve now that my body is in better shape".
	(1d) Achieving a Better Understanding of One's Health	**P7, 75, Male** "I go out less and communicate with others less than I used to. Now, I prefer to be alone. We live out in the country. We sometimes go for a walk after dinner in the fields. There are fewer people now because we live in rural areas. We go outside after dinner to talk with others". "However, the frequency of social interaction appears to be lower than before I became ill. There is less interaction with other people. I prefer someone else".
		P9, 48, Male "I did not care about my body's health before, but now I feel that my health is the most important thing. I did not have much motivation to quit smoking and drinking before. This time, I must quit immediately. Health is the most important, right? I have a better sense of health".
		P15, 56, Female "I can take care of myself as long as I am in good health. I can still work after I recover, and I hope to work again. To put it bluntly, if I improve, I can still dance in the square…My health is still deteriorating. I am a little overweight, weighing around 125 pounds. I get tired easily and will get tired after a while of exercise".

Table 2 Dilemma in Self-Care During the Transition

Theme	Category	Statement
II. Dilemma in self-care during the transition	**(2a) lack of knowledge and education about the disease**.	**P12, 56, Female** "I think I'm OK, I don't need help… and I don't wanna know the disease and what to do for follow-up appointments". **P3, 67, Female** "I don't know anything about my disease. I would also like to learn (about it) … I know less about HF". **P15, 56, Female** "Medically, it would be wonderful to give me some information, like how to rest well and protect my body. I don't know much about diseases". **P4, 70, Male** "This type of video (about diseases) is occasionally viewed on mobile phones. For example, I could have spent more time watching them on Tiktok. However, this video may contain some negative effects and drawbacks at times. Then there are the positive and negative aspects of the Internet. Because my health is already precarious, I am concerned that reading books or watching videos will have negative consequences and add to my psychological burden. For example, I believe that I am no longer a normal person after treatment. In fact, I was aware that this was not the case, so I gradually stopped paying attention to my health. My family members go back and read pertinent information, but I read less". **P7, 75, Male** "I am still determining the specific assistance I require, and I possess a limited comprehension of my current state. On certain occasions, when I experience a sudden sensation of discomfort, I find myself at a loss regarding the appropriate course of action to take. Subsequently, the local county hospital proved incapable of resolving the issue".
	(2b) Lack of understanding regarding medication usage	**P10, 55, Female** "My family members usually remind me to take my medication, but I cannot remember which medication to take. I do not pay much attention to my medications or how they affect me. I am acutely aware of my illness and discomfort, owing primarily to the fact that my family members care for me, and I am aware that my immunity is lacking". **P1, 47, Male** "Which medications need to be adjusted? Who can I talk to about my problems? I hope to call or send a message to ask. It is more convenient to contact them through the Internet, like medication guidance. I'm hoping to consult with the nurse". **P2, 58, Male** "I want to discuss issues related to my condition with a professional. For example, should I be taking a dose of the drug?"

> After I got this disease, to be honest, I cannot walk too far away, my leg muscles became weaker than before, and they cannot support me for a longer time to do the labour on the farm. So, I have to give up my career due to that reason. (P3)
>
> I used to be able to plant 20 acres of land by myself, but now I can't do it anymore. Now my wife is farming. The main reason for the decrease in activity is my physical problems. (P14)

Some patients also described the hospital as a safe environment for them. Following transition, they were often unprepared for the sudden change in environment and felt insecure and overwhelmed. At home, patients engaged in self-care without supervision and managed their health status, creating anxiety and stress. Self-monitoring, especially while the patient is on medication, brings a certain amount of stress:

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Table 3 Lack of Understanding Regarding Medication Regimen

Theme	Category	Statement
III. The desire for help and support	**(3a) Personal and Family Support**	**P10, 55, Female** "I'm sure I'll need someone to look after me. I hardly know how to look after myself". "My family members usually remind me to take my medication, so I don't have to remember what medication to take on my own". "I'm not concerned with the therapeutic effects of each drug". **P15, 56, Female** "I purchased a sphygmomanometer. I purchased this to monitor my blood pressure. My son is also at home during this time when I am at home, and he takes my blood pressure. I cannot do it alone; I cannot even take my own blood pressure. Blood pressure is also within normal limits. The systolic blood pressure is less than 130. It has both 120 and 110 volts. The blood pressure is within normal limits". "My husband usually takes me out on a bicycle to the pharmacy when I need something, such as medicine". **P4, 70, Male** "My children take care of me, doing my laundry and cooking". "Medication is on time. Then our family members are directly assigned the medication before giving it to me". **P12, 56, Female** "My mother and my husband are my caregivers. They care for my daily life, and I depend on them". "(I) take my medication on time, but I don't understand how each medication affects. my daughter knows it. I listen to my daughter anyway". **P15, 56, Female** "I think it's better to talk with doctors about my problems face to face. I would like to learn more about my disease".
	(3b) Support for health care services	**P11, 61, Female** "For example, why is my pulse suddenly low? What is causing my high blood pressure? How to deal with low blood pressure? Anyway, I hope the doctor can explain all of them, and I can take better care of myself after the explanation. I want to know what to do if I meet different symptoms or situations". "Anyway, I will ask the attending doctor when I feel uncomfortable I must go to the hospital if I feel unwell". "The doctor advised taking the antihypertensive medication first. I accepted it. I started with the medicine. You must pay attention to the doctor, and the patient must pay attention to the doctor. They are, after all, experts. You will not be able to do anything if you do not listen to the doctor". **P2, 58, Male** "It just feels like I want to go to a professional to talk about these things. Like, what to do if my heart rate is high? Should I increase or decrease the dosage of my medication? I want long-term, regular professional guidance for my disease. I hope the hospital will take the initiative to provide a follow-up consultation". **P10, 55, Female** "The problem I am facing now is that there are not enough people to care for me. I have a son and a daughter-in-law, but they also need to care for two children. If I am hospitalized, my son and daughter-in-law will take care of me, and no one will take care of the children. And I do not have enough money to hire someone to care for me". " "Medical bills are a bit unaffordable because the cost is so high. I wonder if I could apply for the serious illness subsidy in the community. I was wondering if it is possible to have something like this, and then I can apply it".
	(3c) Support from social and government assistance	**P3, 67, Female** "Now I can no longer farm. I'm a farmer, and no one can help me farm my land. Moreover, the subsidy given to me by the government is insufficient, and I have some financial difficulties".

> The main problem is my blood sugar level and blood pressure are hard to control. Also, every time I went to the hospital, the different doctors gave me different suggestions about how to use the medicines. It makes me feel confused. (P6)
>
> Maybe… I will encounter more problems when I return to my work. The workplace is unlike home, where I can eat regularly and healthily. There may not be a canteen in the workplace, so I must go out to eat every day. I'd like to know how my blood sugar will fluctuate if my diet changes. (P5)

Monitoring New Body Signals

Several participants reported that after receiving a diagnosis of HF, they gained a deeper understanding of their bodies through treatment and daily self-care. Monitoring changes in the body becomes a new daily duty for patients. Some participants responded negatively and were unaware of the significance of the process, stating that they would only be monitored and treated when they were ill or exhibited symptoms:

> I don't monitor my blood pressure regularly. I only measure it when I feel uncomfortable (P1)
>
> As for my intake and output, I generally don't drink water when I'm not thirsty, and I will drink some water if I'm sweating in hot weather. I will take two pills if I feel uncomfortable and have chest tightness. (P14)
>
> I care about only my heart rate and blood pressure. [I] measure [blood pressure] whenever I feel sick. (P2)

Some participants also stated that they will now actively monitor their body indicators regularly, and actively pay attention to their health:

> I measure [blood pressure] four times daily and take a notebook to write down the number because it's hard to remember all the data. Usually, the blood pressure is highest in the morning of the day. Moreover, I pay more attention to my input and output. For example, if I drink three cups of water all day, I know how much I can excrete. The doctor told me I must excrete as much water as I drink. So… I usually pay more attention to my intake and output. (P11)

Negative Social Status

Most participants had a negative attitude toward socialising, with HF having negatively affected their social and communication skills. Physical fatigue means they are unable to actively participate in family and friends' gatherings as previously. The disease-related restrictions on living habits and diet also make them avoid certain occasions, meaning they spend more time at home:

> I didn't have any concerns before I got sick, but now I don't go out frequently. I don't go to drinking and smoking occasions anymore. (P9)
>
> Before I got sick, I loved going out and spent most of my time outside. Now I feel tired physically, and there are fewer entertainment activities like going out. When I am at home, I like to be alone. (P5)

Some participants also mentioned social avoidance, preferring to close themselves off and resist communicating with others. The sense of inferiority and stigma brought about by the disease makes them eager to escape from their previous social circle and prefer being alone:

> I used to be very social, but now I don't like to talk. This is a big change… I don't seem to be talkative anymore. (P4)
>
> From the bottom of my heart, I don't wanna go out or meet other people. It's just annoying for me. (P14)
>
> [I] go out less, and I prefer to stay by myself. Communication with others is less, and I also don't want to join parties or other activities. (P7)

Coping with the Challenges

Some participants stated that the disease has allowed them to re-understand themselves, motivated them to change themselves, abandon some of their past bad living habits and better understand the importance of correct health concepts for their physical health:

> I didn't care about my body's health before, but now I feel that my health is the most important thing. I didn't have much motivation to quit smoking and drinking before. This time, I must quit immediately. Health is the most important, right? I have a better sense of health. (P9)

Although the participants faced the daily challenges of a HF diagnosis, they were dealing with their health issues. Although some patients had experienced the pain of the disease, they were still full of confidence and hope for the future:

> As long as I am in good health, I can also take care of myself, and I can work again… I hope to work again. If I get better, I will still dance. (P15)

Deficits in Self-Care During the Transition

Lack of Knowledge and Education

During the interviews, most participants expressed a lack of knowledge and education about the disease, especially those who had been ill for a short period and often did not understand their condition. They did not know how to care for themselves. Some patients even demonstrated a negative and indifferent attitude, with some not understanding their current state of illness, not wanting to learn about the disease and not caring about treatment options and self-care:

> I think I'm OK, I don't need help… and I don't wanna know the disease and what to do for follow-up appointments. (P12)

However, most patients are concerned about their bodies and are eager to understand and have this knowledge. After returning home from the hospital without professional care, learning more about HF and self-care priorities could help them better adjust to the transition and increase their confidence in self-care:

> I don't know anything about my disease. I would also like to learn [about it]… I know less about HF. (P3)

> Medically, it would be wonderful to give me some information, like how to rest well and protect my body. I don't know much about diseases. (P15)

Furthermore, participants stated that they typically used the internet to learn about related knowledge. The information on the internet is mixed; some may lack rigor or be published without any scientific basis. Patients are attempting to care for themselves after being discharged from the hospital without professional supervision. This lack of systematic and proper understanding may raise the patient's psychological burden and have negative consequences:

> The educational video… sometimes this video may cause some bad effect because there is good and bad content on the network. And I don't know what video is suitable for me… [to] watch these contents instead has some side effects, like increasing the psychological burden. (P4)

Self-Medicating

Taking medication correctly is one of the most critical self-care tasks for Chinese patients following discharge. Many patients are often overwhelmed by abnormal conditions without complete transition care. Without the guidance of a medical professional, patients are often confused about how to administer their medications, with most wanting hospitals to provide professional assistance with medication administration:

> I want to discuss issues related to my condition with a professional. For example, should I be taking a dose of the drug? (P2)

> Which medications need to be adjusted? Who can I talk to about my problems? I hope to call or send a message to ask. It is more convenient to contact them through the internet, like medication guidance. (P1)

Some patients also expressed a desire for help from a specialised doctor or professional. Patients may have residences and hospitals in different cities and seek nearby medical resources when health abnormalities arise. They may receive different advice and medication regimens when visiting different hospitals and doctors. In such cases, patients often do not know whom to listen to, leading to anxiety and feeling overwhelmed:

> I don't know what I should sometimes do. Different hospitals' doctors give different prescriptions, and I'm confused as to whom to listen to… whether there is a uniform standard. (P6)

The Desire for Help and Support

Support from Caregivers

Twelve of the 15 participants reported receiving varying degrees of care from their caregivers. Heart failure affected their physical health and made it difficult for them to participate in heavy work or daily activities. In this situation, they could not move alone or do without the help of a caregiver, meaning the caregiver has a significant role for them. The demographic characteristics of these participants, including age, gender and education, are summarised in Table 4.

> I need someone to take care of me. I [can] hardly take care of myself. (P10)

> My children take care of me, doing my laundry and cooking. (P4)

> My mother and my husband are my caregivers. They care for my daily life, and I depend on them. (P12)

Caregivers assisted in the participants' self-care in addition to their daily routines. The patients were physically and mentally dependent on their caregivers:

> I bought a blood pressure monitor, and my son helped me to measure my blood pressure. I can't do it by myself. (P15)

In addition to taking care of the daily life of the participants, some caregivers of the participants also have to undertake the nursing tasks of the participants. They were reluctant to become more involved in self-care and were not even aware of their condition or the medications they were taking. Some patients defer to their caregivers for their daily food and medications:

> [I] take my medication on time, but I don't understand how each medication affects. My daughter knows, I listen to my daughter anyway. (P12)

> Medication is on time. Then my family members are directly assigned the medication before giving it to me. (P4)

> Usually, my family members remind me to take my medication, and there is no need to remember what medication to take by myself. I don't care about the therapeutic effects of each drug. (P10)

Table 4 Demographic Profile of HF Patients

Name	Age	Sex	Marital Status	Education	Place of Residence	Job Occupation	NYHA Class	Caregiver
P1	47	Male	Married	Junior high school	Rural area	Farmer	III	Spouse
P2	58	Male	Married	High school	City	Staff	II	Spouse
P3	67	Female	Married	None	Rural area	None	III	Spouse
P4	70	Male	Widower	High school	Rural area	None	II	Children
P5	30	Female	Single	Bachelor's	City	Staff	III	None
P7	75	Male	Married	Junior high school	Rural area	None	II	Spouse
P9	48	Male	Married	Junior high school	City	None	III	Spouse
P10	55	Female	Widower	Junior high school	Rural area	None	III	Children
P11	61	Female	Married	High school	City	Retirement	III	Spouse
P12	56	Female	Married	Primary school	Rural area	None	II	Spouse
P14	44	Male	Married	Primary school	Rural area	Farmer	III	Spouse
P15	56	Female	Married	Primary school	Rural area	Farmer	II	None

The Need for Hospital Assistance

Most participants indicated that they often had many problems and disturbances in their daily life during the transition period due to their illness, and the lack of professional knowledge in coping left them feeling overwhelmed. Therefore, some participants wanted more support and help from the hospital, as well as professional guidance to help them transition smoothly from hospital to home and increase their self-care skills:

> I think it's better to talk with doctors about my problems face to face. I would like to learn more about my disease. (P15)

> For example, why is my pulse suddenly low? What is causing my high blood pressure? How to deal with low blood pressure? Anyway, I hope the doctor can explain all of this, and I can take better care of myself after the explanation. I want to know what to do if I encounter different symptoms or situations. (P11)

Some participants indicated that the doctor who treated them in the hospital was the professional they trusted the most. They were also eager for their doctor to provide them with regular help and support long after they were discharged from the hospital:

> It just feels like I want to go to a professional to talk about these things. Like, what to do if my heart rate is high? Should I increase or decrease the dosage of my medication? I want long-term regular professional guidance for my disease. I hope the hospital will take the initiative to provide a follow-up consultation. (P2)

> Anyway, I will ask the attending doctor when I feel uncomfortable I must go to the hospital if I feel unwell. (P11)

Social and Government Support

Some participants mentioned the lack of caregiving staff when they described their difficulties during the transition. With the care of doctors and nurses during hospitalisation, family members were less involved. However, the caregiving responsibility shifts to family members after the patient returns home. Most patients need the assistance of caregivers, but caregivers have multiple identities and jobs simultaneously, meaning they are sometimes overwhelmed when it comes to caring for patients. Patients, therefore, prefer to have a community or other support to assist with self-directed daily caregiving:

> The problem I am facing now is that there are not enough people to care for me. I have a son and a daughter-in-law, but they also need to care for two children. If I am hospitalised, my son and daughter-in-law will take care of me, and there will be no one to take care of the children. And I don't have enough money to hire someone to care for me. (P10)

In addition to the lack of manpower, some families also have financial problems. Due to the disease, patients often lose their ability to work, and the cost of treatment and medication can be a significant expense for families. Some rural families in China have low total household income, which is further compounded when a family member loses the ability to work. Some participants are eager for support and help from government policies to ease their financial stress:

> Medical bills are a bit unaffordable because the cost is so high. I wonder if I could apply for the serious illness subsidy in the community. I was wondering if it is possible to have something like this, and then I can apply it. (P10)

> Now I can no longer farm. I'm a farmer, and no one can help me farm my land. Moreover, the subsidy given to me by the government is insufficient, and I have some financial difficulties. (P13)

Lack of Patient Education

We found that the so-called "patient education" (See Supplementary 1) often manifests itself in practice as a guidance sheet that is information-overloaded, full of jargon and requires patients to make complex self-judgments. Most of the interviewees said that they felt confused, anxious, and helpless to varying degrees after receiving such a single-page guidance.

Medication Adherence

Analysis revealed that the discharge guidance requires patients to “gradually increase the dosage” or “slowly reduce the dosage and discontinue” multiple medications according to their blood pressure and symptoms (as shown in P1 and P2). Such complex self-regulation requirements far exceed the capabilities of ordinary elderly patients, leading them to either not dare to make adjustments or make incorrect ones, resulting in anxiety and non-compliance. This explains why some interviewees stated that “I don’t know whom to listen to” and “I want to ask a professional”.

Diet and Lifestyle Modification

The analysis indicated that the suggestion of a “low salt and low fat” diet on the guidance sheet is too general and lacks specific and feasible operation guidelines. For example, no specific recommended daily salt intake or examples of food options are provided. This can result in the patient feeling at a loss when having to consume three meals a day after returning home. This explains why some interviewees were concerned about “what will happen when eating out” and “not knowing what to eat”.

Follow-Up Plan

Analysis revealed that the patient was required to coordinate follow-ups from multiple departments on their own and remember the re-examination items at different time points over a period of 1 year (as shown in P 2). This fragmented follow-up model imposes a heavy coordination and memory burden on patients and their families. This explains why patients want “hospitals to proactively offer follow-up consultations” and believe that “it would be great if there were someone to take care of me uniformly”.

Discussion

The aim of this qualitative phenomenological study was to investigate the lived experiences of patients with HF during the transition from hospital to home. By exploring the challenges, self-care deficits and support needs of these patients, this study provides valuable insights into the complexities of transitional care in China. The findings highlight the critical need for culturally sensitive interventions and systemic improvements to address the unique challenges faced by patients with HF.

Coping Strategies and Cultural Context

The participants in this study demonstrated diverse coping strategies in response to their HF diagnosis and the challenges of transitional care. While some patients exhibited avoidance behaviours, such as denying the significance of symptoms, these responses may reflect culturally influenced coping mechanisms rather than purely negative behaviours. In Chinese culture, patients often adopt an endurance strategy, which can be misinterpreted as avoidance but is rooted in cultural norms of resilience and self-reliance.[16] This finding aligns with recent studies highlighting the importance of cultural context in understanding patient behaviours.[17] For example, one study found that patients with chronic illnesses often prioritise maintaining harmony within their families over expressing personal distress, leading to similar coping behaviours.[18] However, prolonged reliance on such strategies can delay symptom management and exacerbate emotional distress, underscoring the need for culturally tailored psychological support. Interventions that incorporate culturally adapted cognitive-behavioral therapy have shown promise in addressing these issues.[19]

Communication and Care Coordination

The study revealed significant communication breakdowns between healthcare providers and patients, contributing to confusion in self-care and medication management. While systemic issues, such as fragmented care and limited provider continuity, are primary contributors, individual factors also play a role. For example, patients’ health literacy levels and cognitive impairments can hinder effective communication.[20] Recent research emphasises the role of health literacy interventions in improving patient–provider communication and reducing medication errors.[21] Similar findings have been reported in other low- and middle-income countries, where limited healthcare resources exacerbate communication challenges.[22] Addressing these gaps requires a dual approach: systemic reforms to enhance care coordination and targeted interventions to empower patients with the knowledge and skills needed for self-care. For example, a study in South Korea demonstrated that structured discharge education programmes significantly reduced readmission rates among patients with HF.[23]

Multidimensional Support Needs

The participants emphasised the importance of diversified support systems, including caregivers, healthcare providers and social resources. The caregiver–patient relationship, particularly in the Chinese context, is crucial but often underutilised. Recent studies have shown that caregiver training programmes can significantly improve patient outcomes by enhancing caregiver competence and reducing caregiver burden.[24] This is consistent with findings from Australia, where caregiver support interventions have been linked to improved patient self-care and reduced hospitalisations.[25] Additionally, the study highlights the need for integrated care models that bridge the gap between hospital and home, such as nurse-led transitional care programmes and community-based support networks. Similar models have been successfully implemented in Europe, where nurse-led HF clinics have been associated with reduced mortality and improved quality of life.[26]

Study Limitations

This study has several limitations. First, the small sample size (n=18) and recruitment from a single tertiary hospital may limit the generalisability of the findings. Second, the lack of diversity in the sample, particularly the underrepresentation of rural patients, restricts the applicability of the results to broader populations. Third, reliance on self-reported data may introduce recall bias, and the absence of longitudinal follow-up limits our understanding of long-term transitional care outcomes. Future studies should aim for larger, more diverse samples and incorporate mixed-methods approaches to address these limitations. Finally, this study focuses on the common difficulties that patients will encounter psychologically and in daily life after being informed that they have HF, as well as during the process of returning home from the hospital. The study does not conduct separate research according to the types of HF. Future research could focus on whether there are differences in the difficulties experienced by patients with different forms of HF during the transition period and explore practical and feasible solutions to these problems.

Implications for Research, Practice and Policy

The findings of this study have important implications for improving transitional care for patients with HF in China. First, culturally sensitive interventions should be developed to address the unique coping strategies of Chinese patients. Second, systemic reforms, such as standardised discharge protocols and enhanced care coordination, are needed to reduce communication breakdowns and medication errors. Third, caregiver training programmes and community-based support networks should be prioritised to provide holistic support for patients and their families. Finally, future research should explore the long-term impact of transitional care interventions on patient outcomes, particularly in rural and underserved populations. These efforts should be informed by successful models from other countries, such as the UK's integrated care pathways and Australia's nurse-led HF management programmes.[27,28]

To better operationalise these recommendations, based on the research findings concerning self-care in patients with HF transitioning from the hospital to their homes, we formulated a theoretical framework (for details, refer to Supplementary 2) to simulate the predicaments faced by patients with HF and the coping mechanisms used during the transition period. We also summarised the transitional care process for patients with HF in terms of three primary themes (see Figure 1): the post-admission challenges they face; the dilemmas in self-care during the transition; and the desire for help and support. Each theme encompasses several sub-themes that collectively highlight the emotional, physical and social complexities involved in managing HF. This condensed structure provides a succinct yet profound understanding of the participants' experiences and the universal aspects of their transitional care journey.

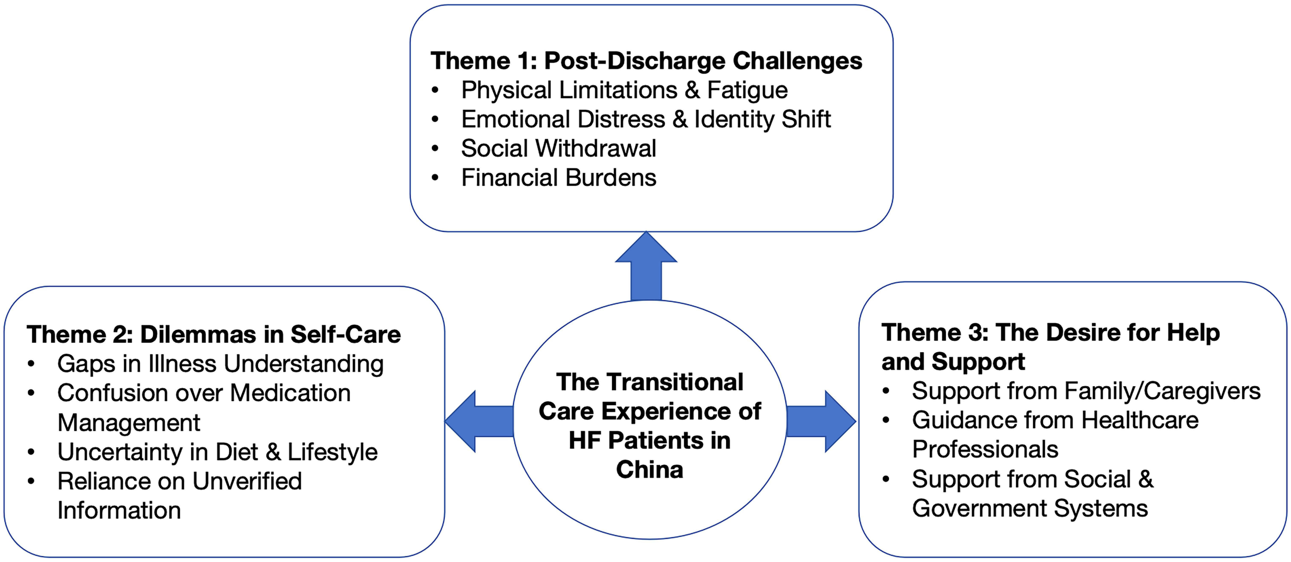

Figure 1 Simulacrum of the hospital to home: The labyrinth of transition in the care of heart failure (HF) patients.

Conclusion

This study identifies three core findings regarding the transitional care experiences of Chinese patients with HF: significant post-discharge challenges (eg difficult adaptation, physical limitations and social withdrawal), critical self-care deficits (eg inadequate disease knowledge and confusion over medication management); and urgent unmet support needs (encompassing family caregiving reliance, sustained professional guidance and social/government assistance). These findings highlight the uniqueness of China's context: rural–urban disparities exacerbate access barriers; fragmented healthcare systems hinder consistent care coordination; and over-reliance on family caregivers – shaped by cultural norms – burdens both patients and their families. To address these issues, targeted interventions are needed, including standardised discharge protocols with rural-specific adjustments, hospital-led telehealth platforms for credible health information and medication guidance, caregiver training programmes and expanded government subsidies for medical costs and community-based support services. Future research should explore multi-centre implementations of these strategies to validate their effectiveness across diverse populations, ultimately improving transitional care quality and patient outcomes in China.

Data Sharing Statement

All data generated or analyzed during this study are included in this published article.

Ethics Approval and Consent to Participate

This study was conducted in accordance with the declaration of Helsinki. This study was conducted with approval from the Ethics Committee of School of Nursing and Health, Henan University. Written informed consent was obtained from all participants, and participant informed consent included the publication of anonymous responses/direct quotes.

Consent for Publication

The manuscript is not submitted for publication or consideration elsewhere.

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Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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An empirical study on the construction and health management of digital virtual wards for elderly patients with heart failure in rural areas under the perspective of rural revitalization(26B330001).

Disclosure

The authors declare that they have no competing interests in this work.

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