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Factor Influencing Self-Care Management among Heart Failure Patients in Saudi Arabia

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ABSTRACT

Background: Effective self-care is vital for improving health outcomes and quality of life in managing heart failure. However, many patients struggle to adhere to self-care behaviors, often due to a complex mix of personal, cultural, and systemic factors. This study aimed to explore the views of patients with heart failure (HF) on factors influencing self-care management.
Methods: A qualitative approach explored patients' experiences with heart failure. Purposive sampling recruited 24 patients at a Saudi tertiary centre from May 2024 to May 2025. Semi-structured interview data were recorded, transcribed, and thematically analysed.
Results: Four themes emerged from the analysis, including (1) internal motivation driven by personal factors, (2) self-adaptation to new diagnosis and adherence issues, (3) conflicts, (4) role, and responsibility.
Conclusion: This study offers insights into self-care management of heart failure among HF patients in Saudi Arabia. It examines factors like culture, habits, beliefs, psychological issues, comorbidities, conflicts, and social values. Most HF participants were motivated to adhere to treatment, resilience, and adaptability to living with heart failure. About half of the participants in this study reported non-compliance. Few had poor self-care, depression, and psychological distress. Some prioritise family over self-care and have difficulty adhering to medication regimens, follow-up, and routines, especially caregivers to their parents. Most participants reported having no dietary restrictions, yet most were fully aware of the discharge counselling. Future research in Saudi Arabia, focusing on HF self-care or a framework that incorporates Saudi culture, is also warranted.

Keywords: Heart failure; Saudi Arabia; Barriers; Facilitators; Factors influencing self-care management.

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INTRODUCTION

Heart failure (HF) is the most common cause of disease globally and the leading reason for hospital readmissions. Managing acute heart failure syndrome involves two stages: initially stabilising the patient during emergency admission, then providing ongoing treatment throughout hospitalisation and after discharge (1). It is a chronic condition that necessitates balancing physical, spiritual, occupational, emotional, and social factors to manage it effectively.

Managing self-care in heart failure patients can be quite challenging. Self-care serves as the cornerstone of managing chronic conditions like HF and can significantly improve treatment results while reducing the burden of the disease (2). Individual with HF who engage in effective self-care behaviours often manage their conditions well, avoid frequent hospitalisations, lower healthcare costs, and maintain a good quality of life. Research among Lebanese HF patients revealed that self-care management notably improves HF outcomes, especially with increased heart failure knowledge, confidence, and strong caregiver support (3). However, studies indicate that most HF patients do not follow a low-sodium diet (25.2%) or HF medication regimens (20%) (4).

Previous studies indicate that HF self-care includes maintenance, symptom perception, and management (5). Self-care management involves dietary restrictions, routine vigilance, medication adherence, daily weight monitoring, follow-up appointments, blood tests, and routine check-ups- lifestyles that must be maintained throughout life to achieve better health outcomes. According to the Self-Care Heart Failure model (6), HF patients should recognise early symptoms, such as shortness of breath, oedema, fatigue, irregular heartbeat, and cough. They should consult a healthcare professional immediately for early intervention, which reduces the likelihood of complications. HF patients should monitor their daily signs, such as weight, and routinely evaluate their health status. Studies have proven that the body-listening factor is crucial for symptom perception (7). They should take appropriate actions if these symptoms represent their usual daily fluctuations; otherwise, they may wait for these symptoms to subside. Furthermore, perceptions of HF among clients vary, as information regarding the disease is selectively processed based on the individual's understanding of the illness, which influences their adaptive coping responses in daily life. Individuals with heart failure regard the hospital as the safest environment for recovery, viewing clinics as checkpoints that offer comfort and security, rather than as a place associated with adverse outcomes following the challenges of managing distressing symptoms of heart failure (8-10).

Factors affecting self-care include worsening symptoms due to cardiac issues and co-morbidities that result in readmission. Other research has shown that pulmonary and systemic congestion are the leading causes of hospital readmission among patients with acute heart failure (11). Thus, the increasing rate of new cases and readmission among heart failure patients in Saudi Arabia is also overwhelming worldwide. Studies demonstrated that vigorous interventions focusing on patient-centred factors are practical, rather than just aiming to reduce hospitalisation rates among heart failure patients in the USA (9). By emphasising self-care knowledge and management, previous studies have proven that it increases patients' compliance with their treatment plan. Studies reported factors influencing the readmission of heart failure patients. For instance, studies mentioned about worsening heart failure, arrhythmia, ischemia, NYHA class III and IV, older age, higher Charlson comorbidity index (CCI), multiple comorbidities, and critical labs like high BNP and troponin I (12,13), sex, income, marital status, living alone arrangement (14,15), lack of self-care knowledge (2), limited teaching of discharge home instruction (14,16,17), which lead to incompliance with the treatment (4). The utilisation of nitrates and diuretic therapy has been proposed to enhance heart failure outcomes, although safely alleviating symptoms and improving hemodynamic during the stabilization phase remains an unmet need (18).

Both the ACC/AHA 2022 (United States) and ESC/EAS 2021 (European) international heart failure guidelines, which are based on data from Western countries, are widely used in Middle Eastern countries. Since 2019, the Saudi Heart Association has been developing guidelines for heart failure (HF) management

in the Kingdom of Saudi Arabia. According to the Saudi Health Council (2022), adherence to these three guidelines depends on individual clinician preferences, which may be influenced by factors such as the place of education, level of awareness, or other personal reasons related to HF patient management. With the increasing number of new heart failure patients each year, providing optimal care is quite challenging for healthcare providers. Several well-designed heart failure registries in Middle Eastern countries aim to identify gaps between practice and guidelines (19), as this condition affects not only individuals with HF but also their families, despite recommendations to improve management; their implementation remains uncertain (20). Several studies on heart failure self-care have been conducted in Western countries, but there is limited research in Saudi Arabia (15,21), where some Western self-care recommendations cannot be easily adapted to the Saudi context, as self-care practices differ based on individual and cultural factors [22]. Saudi Arabia, a Middle Eastern nation characterised by a male-dominated society, exemplifies a collectivist Islamic culture with strong familial and communal ties. Respect for the Islamic faith often results in patients being more reserved in sharing personal and health concerns, frequently seeking faith as a means to alleviate their discomfort. Most research in the Middle East uses quantitative methods, with limited qualitative research exploring patient perspectives on self-care management. As a result, there is a lack of detailed understanding of self-care concepts. Thus, this study's findings will offer substantial information about self-care awareness among Saudi patients with heart failure.

METHODS

The research employed a generic qualitative method to explore the understanding of self-care management among patients with heart failure. This method is beneficial for this study, as it is simple, interpretive, and can stand alone as a researcher's articulated approach (23). An in-depth, semi-structured interview was conducted with a group of heart failure patients from diverse military backgrounds at one of the tertiary hospital in the Eastern Province, Saudi Arabia. Semi-structured interviews facilitated data collection through predefined questions, allowing the researcher control over the interview process (24). The participants for this research were selected using purposive sampling, a sampling technique that involves judgment sampling selection, which does not require underlying theories or a predetermined number of participants (25). Twenty-four participants were recruited, meeting the following inclusion criteria: diagnosed with heart failure with or without comorbidities, admitted to the selected Coronary Care Unit and Cardiac Ward, aged 18 years or older, of Saudi nationality, and fluent in Arabic or English. The exclusion criteria include critically ill patients, such as those on ventilators and those who are haemodynamically unstable.

A six-phase thematic analysis process was employed to identify and examine data patterns. The data obtained from the interviews were analysed thematically, facilitating a systematic identification and examination of meaning patterns within a set of qualitative data (26). In the initial phase, the research team reviewed and understood the data through preparatory analysis. Manual coding was conducted in Microsoft Word to create preliminary codes for qualitative data analysis. These codes helped identify overarching themes. A verification process confirmed that the codes accurately represented the original data by comparing themes with the datasets and addressing the research questions. The research team also established connections and provided detailed descriptions for each theme to assist viewers. Finally, they compiled a report based on the analysis.

Ethical approval was granted by the Kulliyah of Nursing Postgraduate Research and Ethics Committee (KNPGRC), followed by approval from the IIUM Research Ethics Committee (IREC) in Malaysia. In Saudi Arabia, the ethical process continued with approvals from the Ethics Research Committee at a military hospital and the Institutional Review Board (IRB) of the General Directorate of Medical Services in the Eastern Region Armed Forces Hospitals with registration Number: HA-05-DH-075. Participant confidentiality was carefully preserved by not disclosing names or identities during data collection, analysis, and reporting. Before data collection, each participant obtained written consent, ensuring voluntary participation.

Trustworthiness and Rigour

Trustworthiness in qualitative research depends on credibility, transferability, confirmability, and dependability (27). In this study, various credibility strategies, including prolonged engagement, peer debriefing, and member checking, were employed to ensure data quality. After the main study, peer debriefing involved sharing relevant materials with peers, asking critical questions, conducting member checks, providing feedback on interpretations and methods, and documenting the process. The researcher's team reviewed all themes to reach consensus. By offering a detailed description of the phenomena and utilising transferability, the researcher helps distinguish between participant experiences, making conclusions more transferable to other contexts. Confirmability was maintained through ongoing checks during data collection to reflect any biases or biases of the researcher. Dependability was ensured by verifying transcripts and using an audit trail to ensure consistency. Data analysis included identifying themes, highlighting key points, creating initial codes, and assigning provisional themes. Following individual analysis, a peer debriefing with the research team confirmed all themes. Purposeful sampling involved selecting patients, caregivers, or healthcare providers to explore perceptions and enhance transferability. Initial codes emerged from key topics, leading to theme review and definition, with rationales for code integration. The researcher verified transcripts, maintained an audit trail, selected appropriate methods, analysed data, interpreted results, and presented conclusions. A reflexive journal supported this process, further strengthening trustworthiness.

RESULTS

Throughout the data collection process, twenty-four participants agreed to participate in interviews. The background information about the participants is summarized in **Table 1**. Four themes emerged from the analysis, including internal motivation driven by personal factors, self-adaptation to new diagnoses and adherence issues, conflicts, roles, and responsibilities.

Sociodemographic of Participants

Table 1 illustrates the demographic characteristics of heart failure patients for this study. A total of 24 participants were interviewed. All the participants in this study were Saudi. More than half of the participants were 51-80 years old, the majority of whom were male, married (91.7%), and mostly HF participants with comorbidities (79.2%), living with their families (83.3%). Most of the participants were retirees (54.2%) and half of the participants had a university education (50%).

Theme 1: Internal Motivation Driven by Personal Factors

Internal motivations or self-related values affecting motivations include personal health goals. Personal health goals among participants include self-direction to be healthy, as well as those driven by life circumstances. Patient 5 said that he has a weak heart, and he is not the same person as he was 20 years ago:

"I take medication every day, have quit smoking, and do my best to avoid stress. My heart is no longer as strong as it was 20 years ago, so I must take good care of it. I follow my treatment plan, take all my medications as prescribed, and stick to simple exercises. I am doing everything I can within my limits to maintain good health. I have no problems right now; everything is going fine."

(Patient 5, 52 years old, Male)

On the other hand, one of the participants took the initiative, willing to travel to different countries, to find the cure and alternative ways to get a fast recovery from stroke, as Patient 7 told:

"I just go about my daily routine and take care of myself. Controlling my emotions is a priority because it affects my whole day. I am a former smoker. No, I do not feel any burden; I have accepted everything. I even went to Kerala, India, for exercise training as part of my stroke rehabilitation, following advice from friends. Alhamdulillah, I can now move the left side of my body. Before, I could not even walk."

(Patient 7, 54 years old, Male)

Patient 15 shared about their mother as their personal drive to quit smoking:

"I am proud of myself because I was able to stop smoking, especially before my mother passed away. She knew me very well. Alhamdulillah. It was not easy at first, but after a few years, I managed to gain control over my emotions, treatment, lifestyle, and everything that came with it. I have accepted everything that has happened to me. I am an ex-smoker now, no more smoking or alcohol."

(Patient 15, 46 years old, Male)

One inspiring story about positive motivation among HF participants involves religion. Most people engage in spiritual practices, such as reciting the Quran or praying, which brings them closer to God, Allah, by focusing their hopes, beliefs, fears, and anxieties on the disease, treatment, and future. Patient 12 affirmed that:

"Allah is everything for me".

(Patient 12, 61 years old, Male)

Table 1: Sociodemographic of Participants (N=24)

Demographic characteristic	Frequency	Percentage (%)
Age		
30-50	9	37.5
51-80	15	62.5
Marital status		
Married	22	91.7
Divorce	2	8.3
Diagnosis		
Heart Failure (HF)	5	20.8
HF and Comorbidities	19	79.2
Race		
Saudi	24	100
Gender		
Male	21	87.5
Female	3	12.5
Level of education		
Secondary school	12	50
University	12	50
Employment status		
Employed	5	20.8
Unemployed	6	25
Retiree	13	54.2
Living arrangement		
Alone	2	8.3
Spouse	1	4.17
Family	20	83.3
Parent	1	4.17

Theme 2: Self-Adaptation to New Diagnosis and Adherence Issues

Self-adaptation to a newly diagnosed heart failure in this subcategory refers to any lifestyle changes of heart failure patients in their daily lives. The struggle for self-adaptation is particularly intense among patients newly diagnosed with heart failure, as they face sudden lifestyle changes and emotional distress. Patient 7 demonstrated a positive mindset in approaching his routine self-care as a newly diagnosed heart failure patient. By focusing on the positive aspects of his daily management, he fostered a healthier outlook, which may contribute positively to his mental well-being:

"I do not want to take it negatively; I trust in Him. I need to continue with my daily routine, take care of myself, and prioritize controlling my emotions because they can affect my entire day."

(Patient 7, 54 years old, Male)

This account highlights the complexity of self-adaptation among heart failure patients, especially when compounded by comorbid conditions such as stroke and hypertension. It also illustrates a gradual process of physical recovery and a reliance on medical devices and

support for managing multiple health challenges. Patient 8 also shared how his condition affected family dynamics and responsibilities. He stated that:

"My wife learns how to drive recently, so she is the one sending my kids to school, and arranging everything because I am sick."

(Patient 8, 39 years old, Male)

This illustrates the supportive role of family members in adapting to the patient's new limitation, as well as the shifts in household roles that often accompany chronic illness.

Compliance and adherence issues also compromised self-care management practices among heart failure patients, often leading to frequent hospital readmissions due to worsening heart failure signs and symptoms. Despite experiencing worsening symptoms, the participants maintain a commitment to treatment adherence, suggesting that compliance does not always prevent disease progression.

"Alhamdulillah, it is almost four years now. I can adjust my daily activities according to my current condition. I try to adjust my lifestyle. If I have due Lasix medication, I will take the medication early and plan it properly. If I go to work, I will take the medications after I finish my duty. My wife is always there supporting me and helping me."

(Patient 15, 46 years old, Male)

Whereas some participants demonstrated resilience and the ability to adapt their routines to the demands of living with heart failure. One participant reflected:

"I am the one who is taking care of myself. Medications, appointments, exercise, and my diet. I am quite good at managing all of this. Sometimes, I check my weight using my weight scale."

(Patient 19, 31 years old, Male)

Approximately half of the participants reported non-compliance with medical recommendations, especially concerning self-care practices at home. These included difficulties in consistently adhering to multiple medication regimens, non-compliance with symptom monitoring, daily weight monitoring, and adherence to sodium and fluid restrictions. As a result, compliance with the treatments was diminished due to the presence of comorbidities.

For example, Patient 17 requires assistance with daily activities; he is visually impaired and has been diagnosed with heart failure along with comorbidities. He was not compliant with the treatment and neglected his self-care management due to the comorbidities and lack of awareness. From the medical record, he is suffering from an episode of depression, and the doctor referred him to a psychiatric consultation and started him on an antipsychotic drug:

"Yes, it is such a burden to me(treatment). I cannot do anything by myself. I was long-time blind; I have some follow-up and appointments at Babtain Hospital. Sometimes I will go attend the appointment, only if my condition allows me to go".

(Patient 17, 48 years old, Male)

Surprisingly, in this study, one of the participants, Patient 8, declared that he took the medicine only on a particular day:

"I do not have a Blood pressure monitoring machine at home. Sometimes I check my blood pressure in the hospital; if the reading is within an acceptable measurement, I will not take medication. I will take medicine on a certain day, especially only on Wednesday".

(Patient 8, 39 years old, Male)

Moreover, he said that he was ignoring his appointment and did not care about his illness. He believes that he is not sick:

"I am a smoking person, I try to quit but am still in progress, now I take only one packet per day. I did not take the medication on time, and I am just ignoring it. Sometimes I skipped the appointment too. Nobody cares for me, and I am not too worried about myself since I am not sick. I believe my illness will be cured one day. However, now I am here (regret)".

(Patient 8, 39 years old, Male)

The factors influencing self-care management among the participants include motivational factors, such as internal motivation and self-adaptation to a new diagnosis, as well as adherence issues. Apart from that, the next theme includes conflicts, roles, and responsibilities, which will be discussed further in the following categories.

Theme 3: Conflicts

Conflicts and decision-making challenges in this study refer to personal and psychological distress, most of which the participants faced. One of the participants identified personal conflict issues, such as amnesia. Patient 27 pointed out that she experiences episodes of forgetfulness:

"One day, I think I forgot to take my medicine. They gave me a double dosage of warfarin per day for a few days, and I was confused. They took me to the ER. I had shortness of breath, a headache, and swelling in both legs. The doctor advised me to stay a few days for close monitoring due to bleeding risk."

(Patient 27, 66 years old, female)

Sadly, Patient 13 had psychological conflict issues. He has a history of attempting suicide twice before admission. The doctor referred him for psychiatric consultation and started him on antipsychotic medications. According to the medical record, during his admission to the Coronary Care Unit, he was taking Quetiapine 50mg tablets every night as prescribed by the doctor.

"Maybe… (he starts crying) I am sad. Yes, I'm tired of everything…"

(Patient 13, 47 years old, Male)

Meanwhile, Patient 15 also claims that he is not interested in socializing with his friends due to his current condition. The participant reported that he feels more lethargic, embarrassed about his sickness, and overwhelmed by the tiring schedule of routine self-care management therapy at home, adapting to a new healthy lifestyle filled with restrictions and limitations in daily life:

"Everything changes in my life. I take medications, am less active, and no longer do outdoor exercise. Sometimes, I only attend family gatherings and see friends."

(Patient 15, 46 years old, Male)

Fear of dependence, discomfort from adverse effects, and the overwhelming nature of long-term medication use often led some individuals to adjust or discontinue treatment without consulting healthcare providers.

Many participants showed an understanding of their medication regimen and actively tracked side effects. Patient 9, for instance, described her conflicts dealing with the side effects of the prescribed medications, and she refused to take the medication:

"I follow up with my doctors, and I keep reviewing my medications based on my condition. But, Tab Jardiance caused me to lose too much weight."

(Patient 9, 43 years old, Female)

Patient 9 was meticulously adhering to the medication regimen after experiencing the side effects of certain medications. She also expressed emotional distress due to weight loss and body shaming, due to specific prescribed medicines, which affected her psychological well-being. These narratives uncover the complex feelings of heart failure patients toward their medications, treatment and self-care routine. While some patients demonstrated high levels of understanding and compliance, others faced challenges related to conflicts, side effects, logistical issues, or emotional distress that interfered with their adherence.

Theme 4: **Role and Responsibility**

One major hurdle to self-care management in heart failure patients is the added role and responsibility of caring for someone else. For example, Patient 25 and Patient 1 discussed the responsibilities of being the head of the family and also being a patient with a serious illness. For those living in large families, handling household chores, and even as patients, some participants say they often put their own health on the back burner to achieve better health outcomes for their parents or other family members. Living with one's parents is another significant responsibility, especially for a son who is also a husband and caregiver to his own family. Patient 25 was first diagnosed with heart failure 19 years ago and continues to live with the condition. He expressed a deep understanding of his illness and treatment, proudly stating that he has also been the primary caregiver for his mother to this day:

"I'm currently living with my parents. Everything seems clear to me. I have no concerns because I've had experience caring for my mom. I was diagnosed with heart failure 19 years ago. My mother is having a cardiac problem also."

(Patient 25, 50 years old, Male)

He is currently living with his parents and has no problem caring for them, especially his mother. He claims that family is his top priority, but he neglects his own medicine, follow-up care, and self-care routine at home. Another significant responsibility is being an individual with an HF within a large family. Patient 1 mentioned that they have prominent families to care for, besides having some fears as newly diagnosed heart failure.

"I have two wives. I must take care of 2 families. Of course, my illness affects my routine life, everything. I didn't ask other people for help to manage my condition, and family matters."

(Patient 1, 58 years old, Male)

Therefore, role and responsibilities often contribute to difficulties with self-care for individuals with heart failure.

DISCUSSION

Heart failure (HF) is a chronic condition that requires patients to actively engage in complex self-care practices to manage symptoms, reduce complications, and improve quality of life. Despite growing emphasis on patient-centred care, numerous challenges remain in achieving consistent and safe self-management among HF patients, particularly in settings where cultural, psychological, and systemic barriers persist. This study found that participants faced numerous self-care challenges that shape their self-care behaviours, influenced by spirituality, adaptation and resilience, non-adherence to symptom monitoring, temporary disengagement, mental health and hopelessness, family support, caregiver role and cultural barriers. These factors often interact in complex ways, leading to inconsistent self-care routines, nonadherence to treatment, and delays in seeking medical attention. Management of heart failure (HF) self-care presents enormous challenges, primarily due to factors such as adherence to a nutritious diet, consistent medication compliance, daily weight monitoring, and the necessity of seeking medical assistance when required.

In this study, cultural beliefs and spiritual practices had a significant influence on the self-care behaviours among participants. These positive intrinsic motivations were recognised as a meaningful contribution to the factors that influence self-care management practices in individuals with heart failure. Some participants relied solely on Allah the Almighty for assistance, sought forgiveness, strengthened their faith, and entrusted the divine will to overcome their health challenges, demonstrating adaptability to disease progression, lifestyle changes, and disruptions in social interactions. These findings align with other studies (28), which show that patients struggle with disease progression, impaired social interactions, and lifestyle changes due to heart failure. For example, this includes the participant's readiness to travel abroad in search of cures and alternative treatments for quicker stroke recovery. Some participants successfully quit smoking due to the full support and positive motivation from their families. They use their mothers as a personal motivation to quit smoking. It is a chronic condition that affects both physical health and psychological well-being. Many participants perceived their illness as part of God's will, expressing strong reliance on faith and prayer to cope with the emotional and physical challenges of heart failure. This spiritual acceptance often fostered inner peace and resilience, helping patients endure symptoms and adhere to treatment plans with patience and optimism. However, while spirituality provided comfort and strength, excessive fatalistic beliefs occasionally led some participants to underestimate the importance of medical adherence, assuming that outcomes were predetermined. This illustrates the importance of culturally sensitive nursing interventions that acknowledge patients' spiritual worldviews while reinforcing their active role in disease management. Nurses and healthcare providers should incorporate faith-based encouragement and culturally aligned education to empower patients to integrate spiritual coping with effective self-care practices.

Most participants in this study demonstrated resilience and the ability to adapt their routines to the demands of living with heart failure. This finding aligns with previous research (29), which found that reinterpreting chronic HF and finding meaning in coping helps individual with HF, as they cannot change their condition but can improve coping by reframing and adjusting. The struggle for self-adaptation is particularly intense among patients newly diagnosed with heart failure, as

they face sudden lifestyle changes and emotional distress. For example, adopt a healthier diet. Almost all participants failed to adhere to a low-fat and low-salt diet. This finding aligns with research showing that adopting healthier eating are the hardest habits to change (2). Most participants did not understand the importance of limiting sodium, especially individuals with HF from Eastern or Asian countries. These findings help healthcare workers educate participants on reducing sodium intake.

Approximately half of the participants in this study reported non-compliance with self-care practices at home, especially with daily weight monitoring. It is a chronic condition that affects both physical health and psychological well-being. These findings align with other studies (28), which show that participants struggle with disease progression, impaired social interactions, and lifestyle changes due to heart failure. Most participants did not track their weight daily because they had a limited understanding of diuretic side effects and lacked specialised education on heart failure, which lowered their awareness of monitoring symptoms. Since weighing oneself is not a priority in self-care, participants often only check their weight during hospital visits.

This study showed that most participants have a lack of awareness, often discontinued medications at will, visit hospitals during exacerbations without hesitation, and only follow treatment for a few days before resuming everyday routines. Similar to another study (2), most individual with HF struggle to change unhealthy lifestyles and tend to revert to previous habits after symptoms improve. They seek treatment quickly but often delay for months, using strategies based on symptom severity, mood, opinions, or surroundings, ranging from 13.3 hours to 2 weeks, due to limited symptom knowledge and self-care(30). This delay can vary from over half a day to two weeks, often because people might not fully understand their symptoms or know how to care for themselves effectively. Consistent with other studies, temporary behavioural disengagement, or "break time," allows individuals with HF to comfort themselves and alleviate emotional strain; however, healthcare providers must accept, respect, and monitor this coping strategy, as it can exacerbate chronic heart failure (29). Recognising this balance ensures individuals with HF receive compassionate support while managing their condition effectively. Barriers to compliance led to frequent hospital readmissions caused by worsening heart failure.

This study revealed that most participants reported personal conflict issues, including forgetfulness, isolation, overwhelm with the routine, lethargy, and shame about the sickness. These findings align with other studies showing that heart failure impacts mental health, with factors like frailty, denial, age, and severity influencing outcomes such as higher hospital admission risk, treatment compliance issues, and reduced quality of life (31-32). For example, participants shared that they were self-conscious about their weight loss after starting a prescribed medication, which made them less confident due to body shaming, and they isolated themselves. This finding aligns with another study (2, 33), which mentioned that heart failure patients often hide their illness, leading to social isolation. Some participants with comorbidities who feel hopeless about continuing life, rely on medication, and live in a stressful environment, perceive poor self-care management. These findings align with other studies (2), which linked hopelessness in HF patients to depression, disinterest in the treatment, and HF patients in Middle Eastern countries lack proper mental illness treatment (28), which may lead to poor HF self-care outcomes (34). Healthcare providers should assess the mental health of heart failure patients, including anxiety and depression, to enhance self-care. The severity of the heart failure with multiple comorbidities may also restrict a person's ability to manage their symptoms.

Most participants faced challenges in HF self-care, including fear of diagnosis, uncertainty about the future, adjustment to treatments, and increased rest needs. These findings align with other studies, which found that self-care for HF patients is complex (2,30,34), that individuals with HF should monitor HF symptoms, consult healthcare providers if their condition changes, and adopt strategies like reducing activities, managing diet, and controlling symptoms. For instance, participants prioritise housework to conserve energy and manage their households more effectively. Similar to other studies (10), family

involvement serves as a solid support system in everyday life, providing emotional support throughout treatment. The supportive role of family members in helping participants adapt to their new limitations, along with the changes in household roles that often accompany chronic illness, involves lifestyle adjustments for participants in their daily routines as they adapt to the disease.

This study found that most participants' self-care practices were influenced by their roles as partners or parents, as well as by the restrictions resulting from their health conditions. Some participants were not fully compliant with medication due to physical disabilities like blindness , that made them noncompliant with their treatment, even when with family. Some perceived that family is his top priority, but he neglects his medicine, follow-up care, and self-care routine at home, as he is also a caregiver to their parents. This findings similar to another study (29), which affirmed that family involvement as caregivers is vital for effective self-care but can be stressful, as exhausted caregivers may struggle to continue. Healthcare providers should assess caregivers' needs and stressors to support both patients and caregivers. Caregivers and individuals with HF often neglect their self-care, prioritising caring for ill parents over their own well-being, as shown by this study. The willingness to provide care for individuals with heart failure is invaluable. Caring for individuals with HF requires specialised training in medication management, monitoring for significant changes, consulting with healthcare providers, adhering to dietary restrictions, assisting with their daily activities, and maintaining an adequate level of physical activity.

This finding shows that gender inequality, health-seeking behaviour, and traditional cultural food preference played a significant role in shaping the self-care behaviours among participants. Cultural issues affect heart failure self-care by conflicting with medical advice on diet, activity, and adherence, driven by beliefs like fatalism, family values, and gender roles. This study also revealed that gender inequality influences self-care management among heart failure patients; fewer female Saudi participants were diagnosed with heart failure. Another finding (34) showed that there was no remarkable difference between genders in self-care abilities, and cultural beliefs can hinder self-care for chronic heart failure, leading to disease progression and frequent hospitalisations. In Saudi culture, women typically assume significant responsibilities at home, including preparing meals and caring for their families, often including their husbands and children. Female participants in this study reported facing several health-seeking behaviour challenges, including difficulties finding transportation to clinic visits and a companion to accompany them for follow-up or medication refills, and delays in seeking care due to male dominance approval, which is frequently due to cultural barriers. These findings align with other studies that were conducted in Saudi Arabia (35), which reported that many Saudi women prefer traditional home remedies rather than consulting a healthcare provider and delay seeking healthcare until the symptoms worsen, likely influenced by cultural factors. Many women prefer traditional remedies rather than consult healthcare professionals and delay seeking care until symptoms worsen, dealing with several health-seeking behaviour challenges, driven by cultural factors. To support the transmission of Vision 2030, Saudi Arabia has lifted restrictions for women across various domains, particularly in healthcare, education, and male guardianship; however, some challenges persist due to cultural issues themselves. For instance, in this study, one participant claimed that after he was diagnosed with heart failure, all his leadership roles in the family had been shifted, and his wife had to learn how to drive a car and manage the kids by herself. In this study, most participants reported not complying with their dietary restrictions due to traditional cultural food preferences. Another research (28) aligns with this finding that self-care management is poor among HF patients in Middle Eastern countries, especially Lebanon and Saudi Arabia. Cultural preferences for certain foods are primarily responsible for the non-adherence to a healthy diet observed among HF patients.

In summary, various factors such as motivation, barriers, and challenges significantly affect self-care management in individuals with heart failure. Barriers, including a lack of knowledge, poor adherence, and social isolation, persist across multiple domains. Strict adherence to therapeutic recommendations, including daily weight control, regular physical activity, and

limiting salt and fluid intake, can enhance patients' self-care capabilities. These results can serve as guidelines for nurses and other healthcare professionals in educating these participants on the importance of heart failure self-care management.

CONCLUSION

In conclusion, this study offers insights into HF self-care management among HF patients in Saudi Arabia. It examines factors like culture, habits, beliefs, psychological issues, comorbidities, and social values. Most HF participants were motivated to adhere to treatment. Some felt hopeless and fearful about the diagnosis, uncertain about the future, and stressed by the body's adjustment and increased rest needs. Others successfully quit smoking with family support about half reported non-compliance with medical advice, especially on daily weight monitoring and diet. Most showed resilience and adaptability to living with heart failure. This study found that most participants reported personal conflict issues and mental health problems due to the stressful environment and HF treatment. Participants often stop treatment early, resume routines, ignore advice, or discontinue medications, seeking hospital care only if conditions worsen. Most said they have no dietary restrictions if they take medications. Fewer women were diagnosed with heart failure. Some prioritise family over self-care, have difficulty adhering to medicines, follow-up, and routines, especially caregivers to parents. Yet, most were fully aware of discharge counselling from HCPs. Findings from this study suggest that it is not only the treatment itself but also the individual's attitude, appearance, culture, and response to the illness that significantly impact outcomes.

The findings enhance the body of nursing knowledge and provide practical implications for improving patient education, strengthening healthcare policies, and fostering culturally sensitive interventions. Ultimately, promoting self-care management among heart failure patients requires a collaborative, holistic, and sustained effort from healthcare providers, families, and the broader healthcare system. The results of this study underscore the need for policies and guidelines to support participants in managing self-care practices after discharge within the Saudi healthcare system. The study identified diverse factors that shape self-care practices, ranging from individual motivation and cultural expectations to comorbid conditions, psychological stressors, and caregiving burdens. These complex interactions often led to disrupted routines, highlighting the need for personalised, culturally informed strategies to sustain behavioural change. The findings of the current study have implications for patients with heart failure. Healthcare providers should actively prompt treatment with an early diagnosis and treat underlying comorbidities. Future research in Saudi Arabia is also warranted, particularly within a framework related to heart failure self-care that incorporates the Saudi culture.

CONFLICT OF INTEREST

The authors have declared no conflict of interest.

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AUTHORS CONTRIBUTIONS

These authors contributed equally to this work.

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