Nurses' Experience of Self-Management Support for Hospitalised Cardiac Patients: A Descriptive Qualitative Study

Authors Contribution:

The sole author designed, analyzed, interpreted, and prepared the manuscript.

Abstract

Aim: This study explores nurses' experiences supporting hospitalized cardiac patients' self-management practices and associated factors that enhance the implementionof these practices.

Background: Therehas been less effort given toward activating the role of self-management in theearly stages ofhospitalizedpatients' post-cardiac events. Knowing that nurses' experience of supporting self-management practice and the factors that empower the application of self-management practice in hospitalizedpatients' post-cardiac events are not well defined, exploring nurses' experiences in the application of a self-management approach for cardiac patients and the relevant factors will identify areas for potential improvement in supporting self-management practice as part of nursing care.

Methods:A qualitative research design was adopted using in-depth interviews with eight registered nurses in the eastern region of Saudi Arabia who worked withhospitalized post-cardiac events were conducted. Registered nurses' participation in this study was voluntary and approached through obtaining their contact information from the nursing offices in the selected hospitals.

Results: The defined themes in this study were directed by the concepts of Orem's Theory, and four major sub-themes emerged from this study: initiation of self-management practices, self-management system, components of self-management for cardiac patients, and nursing practice issues.

Conclusion: Initiating self-management practices at early stages for hospitalized cardiac patients' post-cardiac events ensured achieving better control and sustained practice. Before establishing any plan, certain factors need to be considered, includingpatient-related factors,

healthcare system,and nursing-related factors. Self-management practice for cardiac patients requires the support of multi-disciplinary teams and a well-integrated system. Nursing roles need to be defined and empowered in the healthcare system to be able to support self-management practices for hospitalized cardiac patients.

Keyword

Cardiac patients;Cardiovascular disease;post-cardiac events; nursing practice; self-management practices.

1. Introduction

Cardiovascular events, including myocardial infarction and stroke, are theleading causes of death. The estimated prevalence of cardiovascular diseases accounts for one-third of deaths worldwide, which indicates that the prevalence of cardiovascular disease has remained high. The associated cost of treating cardiovascular-related events significantly burdens on the healthcare system and patients (Tinsel et al., 2018). Enabling patients to self-manage their illness helps to reduce not only the consequences of complications but also readmission costs.

Self-management empowers patients by ensuring they are knowledgeable about their condition; follow an agreed treatment plan; are actively involved in the decisions relating to their health; monitor signs and symptoms of illness; assume self-care for aspects of physical, emotional and social life; and adopt a healthy lifestyle that promotes their health (Rao et al., 2002). The self-management approach is a patient-centered process using knowledge that is tailored to the patient's needs and behaviors and considering their strengths and barriers to self-management (Rao et al., 2002).

The risk of readmission declined among patients who adhered to self-management programs (Toukhsati et al., 2019). Since patients diagnosed with cardiac conditions and those who develop complications rely on pharmacological and non-pharmacological approaches to management, it

is important to understand and implement both approaches to reach the target goal of managing the condition without complications.The role of the nurse in facilitating patient self-management is crucial. However, it is unclear how nurses do this work during a patient's stay in the hospital. Nurses have historically been responsible for intensive patient-care coordination in hospitals. It is preferable for hospitalized patients to be able to carry out as much of their usual self-care routine as feasible (Otter et al.,2023).

Cardiac patients can understand and follow self-management plans if they are implemented in the healthcare system and tailored to their needs. The self-management plans required for cardiac patients evolve around concepts that support healthy living with the disease or the health condition. Healthcare providers design individual programs in line with every patient's needs and set goals and action plans for patients to adhere to(La Sala, R., 2023). Besides the main goal of medication management, these plans provide instructions on diet, exercise programs, and management strategies for symptoms, pain, and fatigue.For cardiac patients, self-management plans focus on managing the critical aspects of the disease and medication, monitoring signs and symptoms and their severity daily, checking their weight and edema daily, adhering to sodium and fluid restrictions, exercising, and ensuring smoking cessation.

A critical issue that must be addressed is whether nurses enable cardiac patients to self-manage their conditions. Nurses' care priorities in acute-care settings for patients' post-cardiac events focus on hemodynamic monitoring and observing vital signs and symptoms, communicating with the health care team, and alleviating patients' anxiety. There is less effort given toward activating the role of self-management in theearly stages ofhospitalizedpatients' post-cardiac events. Studies identified the significant impact of the first phase of rehabilitation for cardiac

patients post-admission in improving cardiac patient self-management abilities and therefore quality of life (Nasrawi et al., 2022; Shepherd & While, 2012).

Moreover, compared to nurses who work in cardiac care areas, nurses with general clinical experience have demonstrated a distinct lack of knowledge of self-management principles for cardiac patients (Sterne et al., 2014). During their care of cardiac patients, these nurses tend to translate hospital-applied care into education materials for cardiac patients as part of self-management support instead of tailoring the information to each patient's specific needs, which indicates that the nurses lack an understanding of the self-management approach and the need to enhance their skills in patient education (Jankowska-Polańska et al., 2017; Mcconnell& Office, 2017). Jankowska-Polańska et al. (2017) also revealed a knowledge deficit among nurses in self-care principles for patients with cardiovascular conditions, mainly heart failure. As part of self-management, the concept of self-care strengthens the patients' skills through participation in training programs to develop and maintain healthy behaviors(Gholami, M., 2023). However, knowing that the nurses' experience of supporting self-management practice and the factors that empower the application of self-management practice in hospitalizedpatients' post-cardiac events are not well defined, exploring nurses' experiences in the application of a self-management approach for cardiac patients and the relevant factors will identify areas for potential improvement in supporting self-management practice as part of nursing care.

2. Methodology

2.1 Study Design

This study uses a descriptive qualitative research design to explore nurses' experiences in supporting hospitalized cardiac patient's self-management practices. The descriptive qualitative approach can be used to obtain in-depth information from participants' lived experiences, and the

flexibility of the data collection enables us to form a comprehensive summary of the participants' perspectives (Tong et al., 2007).

We used a self-developed, semi-structured interview guide to collect data for this study (Table 1). The structure of the interview items was based on Orem's self-care deficit theory (Reynolds & Cormack, 1990), which is useful for guiding self-care activities undertaken by patients and nursing practices. According to Orem's self-care deficit theory, the main goal of nursing care is to empower and strengthen patients' abilities to perform self-care activities.

Orem acknowledges self-care as a holistic concept encompassing all aspects of life and not only the management of disease, and Orem's theory is determined by a conceptual framework based on four concepts: self-care, self-care agency, therapeutic self-care demand, and nursing agency (Fig. 1). Self-care relates to the personal initiation and performance of healthy activities for health and well-being. The Self-care agency explains the personal power and ability to engage in self-care activities. Therapeutic self-care demands are the necessary and deliberate actions to be performed for a specific duration, following valid methods and a set of operations. A self-care deficit occurs when patients cannot continue providing self-care, thus requiring nurses' knowledge and skills to meet their therapeutic self-care demands (Weiler et al., 2002). Accordingly, nursing agency delineates trained and educated nurses who can support the provision of self-care demands.

2.2 Aim

This study explores nurses' experiences supporting hospitalized cardiac patients' self-management practices and associated factors that enhance the implementation of these practices.

2.3Participant Selection and Research Preparation

This study was conducted with a convenience sample of registered nurses working in the Intensive Care Unit (ICU), Cardiac Care Unit (CCU), and Cardiac Medical Unit, where adult cardiac patients withpost-cardiac events are hospitalized in general tertiary hospitals. Upon receiving ethical approval, information about the study was sent to the nursing administration offices of two selected tertiary hospitals in the western region of Saudi Arabia, targeting registered nurses.

Head nurses were approached to invite eligible registered nurses to participate in this study. This sampling method ensured that only registered cardiac nurses were selected for this study due to the various nursing experiences available in theICU, CCU, and Cardiac Medical Unit.

Selected registered nurses were provided with an overview of the study. Registered nurses who were willing to participate in the study informed the nursing administration office and submitted their signed participant consent to participatevoluntarily.

2.4Data Collection

The data were collected via face-to-face, in-depth semi-structured interviews from July-2022 to September-2022. The first step in this process was to obtain the names and contact details of the registered nurses who agreed to participate from the nursing offices of the selected hospitals. Arrangements for the interviews were made according to the participants' working schedules. An experienced researcher in qualitative research conducted the interview session with participants.

The participants were approached, and the research purpose was discussed with them. The interview sessions were held in meeting rooms in the hospitals upon participants' agreement, and each interview lasted 45–60 minutes. All interviews were conducted using an interview guide (Table 1). The interviews were recorded on audiotape, and the researcher took notes to back up the recordings. The interviews continued until data saturation was reached, which occurred after

the eighth participant, when themes and subthemes were repeated. To ensure data saturation, the researcher conducted two more interviews. Therefore, the data in this study were collected from eight registered nurses.

2.5Data Analysis

The recorded interviews were transcribed and analyzed using Graneheim and Lundman's (2004) content analysis approach (Graneheim&Lundman, 2004). Since Orem's concepts have been used to guide the interview questions, the analysis was deductive and guided by the theory concepts. The first step in the data analysis process was the creation of averbatim transcription of the audiotaped interviews. The accuracy of the transcripts was then ensured by comparing them with the recorded interviews. In the second step, we familiarised ourselves with the data by reading and re-reading the transcripts to understand the meanings of participants' experiences before creating the initial codes (Castleberry & Nolen, 2018). Then, initial codes were extracted from the dataset based on the meaning units and were underpinned by the concepts of Orem's Theory that directed the themes of the study. These codes were then assessed based on similarities and differences and merged into subcategories. These subcategories were sorted and abstracted into identified themes based on similar content. The researcher, an experienced assistant in qualitative data analysis and nursing practice (NT and SA), read through and generated the sub-themes.Therefore,the subthemes were assigned to the general themes as the first draft of the final results. Consequently,these were discussed in an iterative process with a research consultation team to ensure that the process was precise and exhaustive. The research consultation team determined whether themes and sub-themes align with the meaning and represent the study's findings; this is done by revising, adding, and removing sub-themes whenrequired. The final step included refining the names of the themes and sub-themes for aclear representation of findings,

and then the analytical conclusion was reached by comparing the selected abstracts and their association with the research purpose and questions.

2.6 Rigour

Guba and Lincoln's (1982)four-dimension criteria (FDC) were used to testthe study's rigor. Credibility was obtained during the interview process by conducting two pilot interviews to test the semi-structured interview guide prior to commencing the data collection. This criterion was obtained by establishing the researcher's authority, as all investigators in this study had previous experience in conducting qualitative research and were trained in the required process of qualitative study designs.

To ensure dependability, the study maintained a detailed description of its method and applied a stepwise replication of data analysis that was maintained between the investigators (NA and SA), who carefully and independently performed the analysis and then met to discuss the findings. To evaluate the confirmability of the study, the main researcher performed an audit trail for the data by developing a track record of the data collection process, maintaining an open consultation and systematic review of the interview transcripts against the audiotaped recordings, and ensuring coding accuracy against the transcripts. To minimize the risk of bias and ensure the objectivity of the data, which reflects the real experience of registered nurses, the triangulation approach was followed.

Data triangulation was obtained by recruiting nurses from different clinical settings and hospitals. Investigator triangulation was achieved through several discussions conducted with a research consultation team. Methodological triangulation was achieved prior to establishing the data collection process by conducting a pilot interview with two registered nurses. Theoretical triangulation was obtained by exploring similar studies in the field with similar concepts (Weiler

et al., 2002). Member checking was achieved by sending the study findings to participants to confirm the results and resolve any disagreements. The transferability of the research findings was assured by selecting a purposeful sample in this study to ensure maximum variation of experiences and data saturation, which was ensured when no new themes emerged in the analysis.

3 Results

The in-depth interview with ten registered nurses who worked in CCU, ICU, and Cardiac Medical Unit (Table 2) where cardiac patients are hospitalized post-cardiac events identified four subthemes that were underpinned by Orem's Theory concepts.These were initiating self-care practices, self-management systems, components of self-management for cardiac patients, and nursing practice issues (Table 3).

Table 1. Semi-Structured Interview Guide

Theme	Question
Opening Question	• What is the required self-management for hospitalized adult patients after cardiac events?
Self-Care	• Can you explain how your patient initiates self-management activities? • When can you say that your patients are mastering their self-management?
Self-Care Agency	• When do you consider your patient is ready to perform self-care

	activities? • How do you assess your patient's readiness to engage in self-care activities? • What do cardiac patients need to self-manage their condition well?
Therapeutic Self-Care Demand	• Can you give me an example of the self-care activates that cardiac patients need to master?
Nursing Agency	• Do you think you have sufficient knowledge and skills to support self-management? Or do you have gaps in your knowledge and skills? • What do you need to do to improve your knowledge and skills in the self-management of cardiac patients? • Do you experience any obstacles to performing this practice? • What has supported you in performing self-management?

Participant ID	Education	Years of Experience	Area of Practice	Position
Registered Nurse 1	Postgraduate Diploma of Cardiac Care	8 years	CCU	Registered Nurse
Registered Nurse 2	Bachelor of Nursing	12 years	ICU	Registered Nurse
Registered Nurse 3	Bachelor of Nursing	7 years	CCU	Registered Nurse
Registered Nurse 4	Bachelor of Nursing	4 years	Cardiac Medical Unit	Registered Nurse
Registered Nurse 5	Postgraduate Diploma of Cardiac Care	3 years	Cardiac Medical Unit	Registered Nurse
Registered Nurse 6	Bachelor of Nursing	7 years	ICU	Registered Nurse
Registered Nurse 7	Bachelor of Nursing	8 years	Cardiac Medical Unit	Registered Nurse (Patient Education)
Registered Nurse 8	Bachelor of Nursing	10 years	CCU	Registered Nurse

Table 2. Participants Information

Table 3.Themes, subthemes and quotations form the interviews.

Orem's Theory Concepts (Themes)	Sub-Themes	Codes	Interview Quotation
Self-Care	Initiation of self-management practices	• Older patients with previous diagnosis • Time of diagnosis • Health literacy	• **Registered Nurse (RN) 1:** 'I can't guarantee that most of my patients are confident to master the skills of self-management as they are old, they do not have the knowledge needed to support them, they were previously not adherent to their medications, and they always come back to us with complications.' • **RN 4:** 'We receive cardiac patients, usually after complications. During the assessment, we can tell that these patients did not adhere to their medications or to the previous instructions they've been given'. • **RN 8:** 'Initiating new knowledge and habits for chronic cardiac patients is hard because they try different approaches for themselves, and correcting their habits is hard. The process should be established upon their first diagnosis to be effective. • **RN 3:** 'Some patients, especially newly admitted cardiac patients, are provided with information and taught the required skills for their condition. There is no focus on self-management as a model of care, which I believe is important to prevent readmission, as we saw some new cases return for readmission'. • **RN 5:** 'Our nursing background about the self-management approach is not comprehensive enough to support newly diagnosed cardiac patients; it can be asshort as providing them with education but does not extend to specified knowledge of self-management practices.' • **RN 8:** 'However, if the patient is new, there is a high chance that they will follow the instructions we give them, as this is their first time receiving the information compared to previously diagnosed patients'. • **RN 7:** 'Being uneducated is not an obstacle that stops patients from learning. I have seen a few old cardiac patients who are uneducated and keen to learn how to manage their conditions; they ask questions and involve their families to understand the required care'. • **RN 3:** 'There is a lot of medical information that patients need to master. Cardiac

			patients have access to all this information, and are ready to follow it up, but the model lacks what they need to prioritize their conditions and what they need to monitor and correct'.
Self-Care Agency	Self-management system	• Patient preparedness • Systematic process • Continuity of care	• **RN 1:** 'We estimate every patient case depending on their health condition and information we take. Not all patients are ready, especially those who come with complications; they lack a lot of support to revive again'. • **RN 2:** 'I consider cardiac patients are ready to engage in self-care activities when they have all supporting factors outside the hospital like family, a healthy culture, and financial support; otherwise, they will struggle to adhere'. • **RN 1:** 'As a nurse, I am obliged to provide education for my patients, but not a lot of nurses do educate their patients. Some leave it for the physician to do because they see that their role is only to provide clinical care because this is what the hospital supported'. • **RN 3:** 'The nursing education department formats some education materials for cardiac patients, but this is only an initiative by nurses, not supported by physicians or healthcare team, and it usually focuses on the general required information for cardiac patients depending on their condition. It is not specified for every patient case'. • **RN 5:**'To master self-management by cardiac patients, I believe that this should start from the time of patient admission and continue in the follow ups. The hospital applies some sort of education for the patient for the required management of their medication and diet, but it lacks a lot of details or specific details that need to be addressed for their case'. • **RN 4:** 'After a cardiac patient gets discharged from the hospital, he/she follows up with the physician in the outpatient clinics. Sometimes patients do not see the physician but the resident or the intern in the clinic who might not emphasise the same issues that were under focus when he/she was discharged'. • **RN 3:** 'The hospital has a good system for booking the availability for the next appointment and other diagnostics like lab test and ECG, but if the patient did not attend there is no follow-up system for missed appointments'.

Therapeutic Self-Care Demand	Components of self-management for cardiac patients	• Medication knowledge • Complication monitoring • Diagnostics • Sustainable behaviours	• **RN 6:** 'The cardiac physician should educate the patientabout cardiac medications, for example, antiplatelet medications; if the patient stops them, their stent will block. The patient also needs to be educated about blood pressure medication; there are cardiac medications for contractility that the patient needs to know about, and they are required to assess their own pulse when taking them'. • **RN 8:** 'Part of the provided patient education for cardiac patients is to teach them how to assess for complications. For example, assessing body weight and eating habits, pulse rate, and any unusual symptoms'. • **RN 6:** 'We tell the patient to keep a diary for themselves to record their BP, pulse measurements, and any unusual feelings, changes in diet, or missed medication intake'. • **RN 3:** 'Patients should be notified that they should follow up with the Eco clinic for monitoring ECG'. • **RN 6:** 'Blood tests are important in the plan of care, and they are requested frequently when the patient sees the physician'. • **RN 1:** 'From my personal readings on the topic of self-care, I know that the focus is on patients' behaviors. We do some patient education in the hospital for cardiac patients, but I do not think we provide education on patients' skills assessment and whether they can sustain the behaviors for self-care'. • **RN 6:** 'The difficulty arises in older aged patients; some of them need support to maintain the self-management behavior, there are other older patients who have the care activities as ahabit of their daily routine'.
Nursing Agency	Nursing Practice Issues	• Nursing preparation	• **RN 5:** 'I do have enough support myself to support my patient self-management practice. What I do in my practice today was part of the postgraduate certificate of cardiac care that I studied. I had three months of training in a rehabilitation centre in X hospital where I did my degree, so I learned by practicing with different cardiac patients'. • **RN 2:** 'Nurses are well prepared and assessed for their clinical competencies. They do well when patient is in admission but not a lot of them have the qualification or knowledge that helps them to support self-management education'.

		• Healthcare system support • Role definition	• **RN 3:** 'I find the biggest obstacle for me is that this practice gets approved by the hospital policy for nurses to engage in them. The other obstacle is the functionality of teamwork support; it needs a collaborative team'. • **RN 1:** 'There are few nurses who are specialized in cardiac care, and they have the qualification to provide self-management, but they are mostly assigned to provide bedside nursing care, which is different from self-management and self-care education.' • **RN 8:** 'Patient education is part of the family physician role in our hospital. They educate cardiac patients on what's needed for their care. Nurses are theonly care providers at thebedside because of our shortage'. **RN 7:** 'The education provided for cardiac patients is shared among nurses, physicians, and pharmacies and is not integrated. I see my patients usually overwhelmed with a lot of given information from different healthcare providers'.

4 Discussion

This study explored nurses' experiences in providing self-management support for hospitalized cardiac patientspost-cardiac eventsand the associated factors that enhance the implementation of their practice. The findings supportthat self-management practices for cardiac patients require special consideration ofthe factors that support better patient outcomes. Under the umbrella of Orem's theory, our studyidentified four themes from the perspective of nurses that support initiating self-management practice for cardiac patients: patients' health conditions, needsassessment, elements of effective self-management, and the role of nurses in self-management.

The initiation of self-management practices from a nursing perspective is associated with patients' health status, which includes the patient's current health situation, time of illness diagnosis, andhealth literacy. It is difficult to initiate self-management practice with patients who havedeveloped complications, especially in the case of elderly patients, because elderlypatients with cardiac issues have an increased prevalence of dementia and mild cognitiveimpairments compared to healthy people of the same age (Adelborg et al., 2017; Li et al., 2020). Self-care activities represent a challenge to elderly people since they require making decisions about behaviors that maintain physical and mental stability, and the risk ofcardiovascular complications increases with age. Nurses agree that the importance of self-management of health conditions emerges when patients have the ability to monitor their health issues. The special needs of elderly cardiac patients should be addressed and monitoredby multidisciplinary health teams, particularly without social support (Jankowska-Polańska et al., 2017).

Although studies have found that there is no significant difference in the need for self-managementsupport for previously and newly diagnosed patients because the manifestation

of the illnesschanges over time and alters the required self-management tasks in every stage of the illness (van Houtum et al., 2013), the results of our interviews showed that newly diagnosed patientsreflect better initiation of self-management activities. Based onnurses' experiences, theeffectiveness of mastering self-management activities tends to be better amongnewly diagnosed patients because they acquire and master the behaviors in the early stages of the disease before they can develop poor habitual behaviors. Nevertheless, as self-management programs are habit-forminginterventions that sustain repeated actions, old habitual behaviors thatdisengage chronic patients from self-management activities fade if such habits are consistently supplanted with alternativeresponses that require conscious attention (Qiu et al., 2020).

This study identified that needs assessment is an integral part of the self-management system for cardiac patients, but it cannot be established effectively if it does not assess patients' preparedness, have a systematic process, and provide continuity of care.The challenge for optimal self-management in cardiac patients is integrating multipleskills and behavioral changes. Studies have identified the role of patients' confidence and preparednessin creating new behaviors, and patients reflecting a high confidence level and readiness to performself-management activities tend to have better self-management of their healthconditions (Al-Hammouri et al., 2020; Qiu et al., 2020). In actual practice, patients are enrolled in self-management programs based ontheirdiagnosis and health condition needs, and since the self-management interventions are complexand tackle multifactorial issues in cardiac patients, it is essential to assess patient health literacy level and whether patientsare ready to engage in this new practice; otherwise, it could be demotivating or overwhelming forpatients.

The essential elements for effective self-management by cardiac patientsare medication knowledge, complication monitoring, diagnostics, andsustainable behaviors. The self-management guidelines for cardiac patients provide information for patients regarding

managing their medications, monitoring complications, knowing about the diagnostic measures required, and sustaining their care activities.The self-management guidelines recommend providing patient education, with a particularemphasis on adherence and self-care. However, the approaches used should carefully consider each patient's level of knowledge and psychological status that supports involvement in care, as some patients might not be able to make decisions regarding changes to medications and lifestyle and thus need support from their healthcare providers throughoutthe process (Jaarsma et al., 2021).

Moreover, patients undertaking self-management must maintain frequent diagnosticcheck-ups and self-monitor for complications. Clinical assessments of some symptoms mightbe complicated for cardiac patients, such as maintaining euvolemia levels with the lowest dose ofdiuretic therapy, as some patients remain congested despite diuretic medication adherence (Jaarsma et al., 2021); therefore the role of effective monitoring system is essential to tackle the diagnostic issues for cardiac patients. It is clear that nurses in our study confirm the elements of self-management guidelines for cardiac patients with a high emphasis on the need for customized plans for every patient's needs.

To maintain self-carebehaviors, cardiac patients must maintain physical and psychological stability and self-monitor signs and symptoms. Sustainable behavior is crucial to achieving better controland preventing potential worsening. Nevertheless, sustaining cardiac patients' behavior in self-management activities is an ongoing challenge for healthcare providers (Choi et al., 2022).Self-management support and education are team-based care provided to patients. The process is comprehensive and targets all aspects of care. However, our findings highlight gaps in the system of self-management support. The participants indicated that nurses and physicians currently provide only a fragmented system for self-management support and that self-management support is limited to providing patient education.

The nurses in our study also expressed the limitation of their role in engaging in self-managementsupport for their patients. Coates (2017) stated that nurses cannot perform their role in self-management support due to organizational and health system constraints.Self-management support is successful when there is continuity of care (Coates, 2017). However, the nurses in this study expressed that while the health service supports engaging cardiac patients in self-management programsupon discharge, it lacks the continuity of care and monitoring required for these patients, whichincreases the risk of patients disengaging from self-management programs and experiencingcomplications.

Nurses play an important role in supporting self-management for cardiac patients; however, their ability to provide that support requires preparation, the availability of healthcare system support, and a clear role definition.Beyond self-management knowledge, nurses must extend their competence to facilitatepatient empowerment. Anderson and Funnell (2010) asserted that for nurses to embraceempowerment, they need to shift the paradigm of the traditional approach to care (Anderson & Funnell, 2010). However, thehealthcare system does not provide sufficient support for nurses to embrace the role of self-management.

When cardiac patientsfollow self-management practices, they are governed by an appointment schedule with physicians in outpatient clinics and have minimum interactionwith nurses. In addition, the nursing role in self-managementpractice remains undefined despite the certification and specialization that nurses develop to practice in this field.

5 Conclusion

Empowering self-management practices for cardiac patients isdeemed a better quality of life and reduces the chance of recurrent admissions with unexpected complications. Initiating this step at an early stage ensures achieving better control and sustained practice; however, the

real practice shows that this step comes in the follow-up stage after discharge. Although the guidelines for self-management practice agree on certain elements to be followed in the plan of care, self-management practice can be multifactorial since every patient's special needs mustbe considered in the plan for successful results.

Certain factors must be considered before establishing any plan; these involve the patient's age, diagnosis, literacy level, and psychological status in the assessment stage to ensure that patients can carry on self-care activities. However, this practice requires the support of a multi-disciplinary team and a well-integrated system. Nursing plays a major role in initiating the system of self-management practice for cardiac patients; their role needs to be defined and empowered in the healthcare system.

Consent and Ethical Approval

The proposal for this study was submitted to the IRB committee at Umm Al-Qura University. Upon receiving approval for this project (IRB No: HAPO-02-K-012-2021-09-749), we sent an information flyer to the nursing administration offices of two general hospitals in Makkah and Jeddah cities to inform them about the study. The information flyer listed the study objectives, aims, participation eligibility, and predicted input. The nursing administration offices then communicated with their internal departments at the hospitals to facilitate the recruitment of participants. Informed written consent has been obtained from all participants

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Figure 1. Orem's Self-Care Theory