

THE EXPERIENCE OF HEALTHCARE WORKERS AND PATIENTS IN THE IMPLEMENTATION OF DISCHARGE PLANNING FOR HEART FAILURE PATIENTS

1st Amoy Amelia Sanusi¹

2nd Wan Nishfa Dewi^{1*}

3rd Bayhakki¹

4th Sri Wahyuni¹

5th Nurul Huda¹

6th Erika¹

¹Faculty of Nursing, Universitas Riau,
Pekanbaru, Riau, Indonesia

*email: wan.dewi@lecturer.unri.ac.id

Keywords:

*Components
Discharge planning
Health Education*

Abstract

Ineffective discharge planning results in discontinuity of patient care at home. This condition worsens patient outcomes, leading to patients returning to health services with the same medical history or with new and more severe complications. This study aims to explore the experience of healthcare workers and patients in implementing discharge planning for heart failure patients. This study employed a phenomenological design with a qualitative, interpretative approach. The participants consisted of 17 individuals: ten health workers from a private hospital in Pekanbaru, two heart specialists, three nurses, two pharmacists, three nutritionists, and seven patients with heart failure who were planning to return home. Participant recruitment was conducted using a purposive sampling method. Data collection was through in-depth interviews, and data analysis used the Colaizzi analysis stages. Four themes are interrelated with the studied phenomena: the information received by patients regarding discharge planning, specific education for heart failure patients, the challenges faced by healthcare workers in completing the discharge planning form, and the important components of discharge planning for heart failure patients. The experiences of healthcare workers and patients in implementing discharge planning in this study reveal that there are still inadequacies that concern both healthcare workers and patients. The themes identified in this study can contribute to the development of discharge planning forms for heart failure patients. Therefore, this study on healthcare services suggests that it may reduce the recurrence rate of heart failure in patients.

Received: August 2025

Accepted: September 2025

Published: November 2025



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INTRODUCTION

Efforts to develop effective discharge planning, particularly for patients with heart failure, are crucial to improving the quality of patient care. A case study revealed that there is currently no specific discharge planning for heart failure patients in Indonesia, highlighting the significance of this research (1).

Heart failure is one of the most common causes of rehospitalisation within the first 60 days after hospital discharge due to inadequate discharge planning and non-adherence to patient medication (2). After discharge, the care ability of the patient and family is undoubtedly required to manage and prevent fatal risks, as well as to prevent rehospitalisation within 30 days (3).

The frequency of heart failure rehospitalisation reaches 45% per year (4). Heart failure cases in Central Java from 2016 to 2018 at the Islamic Hospital of Banjarnegara, Central Java, ranked among the top three, with a rehospitalisation rate of more than 50% for heart failure cases (5). Rehospitalisation data from one of the private hospitals in Pekanbaru from January 2021 to September 2022 showed that 369 patients (81%) out of a total of 453 heart failure patients were readmitted or rehospitalised. The occurrence of rehospitalisation in heart failure patients is influenced by discharge planning (6).

Currently, there is no specific discharge planning format for patients with heart failure. This underscores the need for tailored discharge planning components for heart

failure patients. By addressing the unique needs of these patients, such as medication adherence and lifestyle changes, we can reduce the rate of repeated hospitalisations, accelerate the healing process, and decrease the mortality rate due to heart failure.

The development of discharge planning that aligns with patient needs is a crucial aspect for achieving continuity of patient care. The objective of this study is to investigate the experiences of healthcare workers and patients in the implementation of discharge planning for patients with heart failure.

METHODS

This study employed an interpretive qualitative approach, which is highly suitable for the research objective. The interpretative qualitative approach in this study used a phenomenological design, which investigates human experiences to seek explanations of events based on perspectives that contain facts and are contextual (7).

This study was conducted at one of the private hospitals in Pekanbaru City, Riau Province. The researcher chose this location because, based on the investigation results, the hospital does not yet have a specific discharge planning protocol for heart failure patients; the existing discharge planning remains general.

Participants in this study were selected using a purposive sampling method. The participant recruitment process was carried out through discussions with nursing managers. The selected participants were those who met the inclusion criteria, namely, heart failure patients planning to be discharged and all healthcare workers providing direct care to heart failure patients, comprising seven heart failure patients, two cardiologists, three inpatient cardiac care nurses, three nutritionists, and two pharmacists.

The data collection process in this study used a semi-structured interview method. In this data collection, interviews were conducted directly between the participants and the researcher. The researcher conducted each interview, which lasted 30 to 45

minutes. The interviews were conducted at locations determined by the participants. During the interview process, recordings were made using a recorder and a mobile phone, and the recorded results were then transcribed verbatim by the researcher.

The data analysis process in this study used Colaizzi's method. The first step was to ensure the credibility of the data by validating it through providing each participant with a verbatim interview transcript and asking them to verify the accuracy of the transcript. Second, the transferability process was carried out by writing the research report with clear and detailed descriptions. Third, the dependability test was conducted by involving the thesis supervisor throughout the data analysis process, and then the researcher processed the data into themes. Fourth, the principle of confirmability indicated that the research findings addressed the research questions and were not biased.

Prior to conducting the study, ethical approval was obtained from the Research Ethics Committee for Nursing and Health, Faculty of Nursing, Universitas Riau, with approval number 579/UN19.5.1.8/KEPK.FKp/2024. Therefore, this study was conducted by the institutional ethical regulations.

RESULTS AND DISCUSSION

Based on the data analysis using Colaizzi's thematic method, four major themes were identified: (1) discharge planning information received by patients, (2) provision of specific education to heart failure patients, (3) challenges faced by healthcare workers in completing the discharge planning form, and (4) essential components of discharge planning for heart failure patients. The themes and sub-themes are summarised in Table 1.

Table 1. Results of Thematic Analysis

Sub-Theme	Theme
Information on medications and treatment	Patients receive discharge planning information
Information on physical activity and exercise	
Fulfilling rest needs	
Relapse management methods	
Receiving repetitive information	
Limited information received	Provision of specific education to heart failure patients
Education related to medications and treatment	
Education on a healthy lifestyle	
Education on relapse management actions	
Non-adherence with the treatment program	
Obstacles in completing the current discharge planning form	Challenges faced by healthcare workers in completing the discharge planning form
Fluid management component	
Medication administration schedule	Essential components of discharge planning for heart failure patients
Purpose of medication	
Blood glucose result component	
Salt intake amount	
Diet type component (low sugar, low fat, low salt)	
Components of diet options and nutritional needs	
Components of weight and BMI monitoring	
Emergency contact number	

Discharge Planning Information Received by Patients

The findings indicate that patients received information related to medications, physical activity, rest needs, adherence to treatment, and relapse management. These results suggest that healthcare workers attempted to deliver holistic education; however, patients perceived the information as limited and often repetitive. This finding aligns with previous research demonstrating that heart failure patients commonly report inadequate or

fragmented information during the transition from hospital to home (8).

Medication adherence emerged as a critical area of discharge information. This aligns with the findings of Silavanich et al. (9) who reported that optimal adherence improves physiological function, quality of life, and rehospitalization outcomes. Supporting this evidence, Kunz et al (10) found that non-adherence to heart failure medications significantly contributes to the progression to acute decompensation and subsequent emergency department admission.

The pattern of repeatedly delivered yet insufficient information underscores gaps in communication. Kynoch similarly identified that inconsistent or poorly structured communication during discharge leads to decreased patient confidence and limited self-care capabilities (8). In line with this, Oh et al (11) demonstrated that implementing a structured and patient-centered discharge education approach such as the teach-back method significantly improves patients' comprehension, reinforces their self-management abilities, and enhances their readiness for post-discharge care. These findings further emphasize the importance of clear, interactive, and systematic communication in supporting optimal outcomes for heart failure patients.

Provision of Specific Education to Heart Failure Patients

This study found that healthcare workers provided detailed education related to medications, including names, dosages, quantities, frequency of administration, method of use, potential side effects, and therapeutic benefits. These findings are supported by Wu and Moser, who demonstrated that patients who discontinue or modify their heart failure medications without medical supervision have significantly higher risks of cardiac events, acute decompensation, and rehospitalization. Such evidence highlights the necessity of strengthening medication-related education prior to

discharge to ensure safe and effective continuity of therapy (12).

In addition to medication-related education, patients received guidance on fluid restriction (1–1.5 liters/day) and low-sodium, low-fat dietary practices. These recommendations correspond with the American Heart Association, which underscores sodium and fluid regulation as essential aspects of heart failure treatment (13). Consistent with these findings, Billingsley et al. reported that targeted dietary interventions, particularly sodium reduction and avoidance of processed foods, significantly improve symptom control, reduce edema, and enhance adherence to heart failure self-care behaviors (14).

Furthermore, patients were taught to monitor daily weight, assess lower-extremity edema, and measure blood pressure correctly to detect worsening symptoms at an early stage. These findings are supported by Umeh, who demonstrated that structured self-monitoring behaviors, including daily weight tracking and symptom surveillance, significantly reduce emergency department visits and prevent acute decompensation among heart failure patients (15).

Patients were also encouraged to perform light-intensity physical activity, such as slow walking for 5–10 minutes daily. This is consistent with the American Heart Association's scientific statement on exercise training for heart failure, which highlights that individualized low to moderate-intensity exercise programs are safe, improve functional capacity, and reduce rehospitalization (16). Overall, these results emphasize that structured and evidence-based education is essential to strengthen patient self-management and minimize adverse outcomes following discharge.

Challenges Faced by Healthcare Workers in Completing the Discharge Planning Form

The study identified several challenges experienced by healthcare workers when completing the discharge planning form. Key sections, including the knowledge,

action, and diet components, were often incomplete. Healthcare workers reported difficulties completing the form, leading to reliance on verbal explanations without proper documentation. These findings are consistent with Nasiri et al., who demonstrated that insufficient organizational support, lack of standardized discharge planning tools, and heavy workload contribute significantly to documentation gaps and inconsistent implementation of discharge planning. Their qualitative study further highlighted that inadequate attention to discharge processes and deficits in institutional sub-structure often force nurses to rely on verbal guidance rather than comprehensive written documentation (17). These insights reinforce the need for standardized, well-supported discharge systems to facilitate accurate documentation and improve continuity of care.

The consequences of inadequate discharge planning are significant. The results of this study demonstrate that incomplete discharge documentation may prolong recovery, increase the likelihood of symptom relapse, and contribute to rehospitalization. This is supported by a Cochrane systematic review by Bradley et al, which found that poorly structured or incomplete discharge planning is associated with higher rates of unplanned readmissions, while comprehensive and standardized discharge processes significantly reduce 30-day hospital readmissions (18). These findings suggest that improving discharge planning requires not only standardized documentation tools but also adequate training, organizational support, and streamlined workflows to ensure that all required information is consistently recorded and effectively communicated.

Essential Components of Discharge Planning for Heart Failure Patients

Effective discharge planning requires a comprehensive set of elements that address the patient's medical, functional, and psychosocial needs. According to the Agency for Healthcare Research and Quality's *IDEAL Discharge Planning Implementation Handbook*,

essential components include a reconciled and clearly explained medication list covering drug names, dosages, timing, purposes, and potential side effects as well as individualized instructions regarding diet, activity, and symptom monitoring. The handbook also emphasizes discussing test results, highlighting warning signs, involving family members in discharge meetings, and ensuring that follow-up appointments and emergency contact information are provided before discharge. These structured components are designed to support continuity of care, enhance patient understanding, and reduce preventable readmissions (19).

The findings of this study indicate that, beyond the standard components, several additional elements are essential for heart failure patients due to the complexity of their condition. These include detailed fluid management instructions, clear medication administration schedules, explanations of the purpose of each medication, documentation of blood glucose results, guidance on allowable salt intake, and specification of dietary requirements such as low-sugar, low-fat, and low-sodium diets. Additionally, guidance on dietary options and nutritional needs, as well as structured monitoring of weight and body mass index (BMI), were identified as important components of a heart failure-specific discharge plan (20). These elements facilitate early identification of fluid retention, support medication adherence, and help patients maintain stable clinical status at home.

The study also highlights the importance of providing an emergency contact number to support patients in recognizing and responding promptly to warning signs. This recommendation is consistent with the 2022 AHA/ACC/HFSA Heart Failure Guideline, which emphasizes the need for clear instructions regarding red-flag symptoms and appropriate emergency actions as part of discharge preparation (13). Evidence from Dickson further demonstrates that heart-failure-specific discharge interventions, particularly those that include symptom action plans and emergency

contact information, significantly improve patients' readiness for discharge, strengthen self-care behaviors, and reduce unplanned readmissions (21).

CONCLUSION

The findings of this study indicate that the implementation of discharge planning for heart failure patients remains suboptimal, particularly in terms of information delivery, specific patient education, and documentation. This study emphasises the importance of refining the discharge planning process to make it more structured, consistent, and tailored to the individual needs of heart failure patients. The interpretation of these findings underscores the importance of developing a more comprehensive discharge planning form, along with repeated and structured education delivered by healthcare professionals. Thus, discharge planning serves not only as an administrative procedure, but also as an educational tool to enhance patient and family preparedness for home care and contribute to reducing the rate of rehospitalisation.

ACKNOWLEDGMENT

The authors express their gratitude to Universitas Riau for academic support and to the management and healthcare professionals of the private hospital in Pekanbaru for facilitating this research. Appreciation is also extended to all participants for their valuable contributions.

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