

Nursing Management of a Patient with Heart Failure

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Introduction

The purpose of the assignment is to critically analyse the nursing care of a 75-year-old male patient, Mr Ned Flanders, who was diagnosed with hypertension and atrial fibrillation 10 years ago. The assignment investigates the diagnosis and assessment by using assessment frameworks. Nursing-sensitive outcomes and nursing interventions are also critically discussed to promote a healthy lifestyle for Mr Flanders.

Mr Flanders has been feeling shortness of breath on exertion and he visited the GP as he was struggling to breath at rest. He has started to sleep on a chair at night he struggles to breath while lying down. Mr Flanders also complained of being fatigued which has reduced his quality of life. He also has bilateral oedema on both legs, reduced energy levels, and low appetite. According to Hajouli and Ludhwani (2024), symptoms of heart failure include shortness of breath, orthopnoea, nocturnal dyspnoea, oedema, loss of appetite, and constant fatigue. The pathophysiology of heart failure involves inability of heart to pump blood to meet the systemic demands. The alterations in the cardiac structure due to ischemia, existing cardiac issues, or myocardial injury initiate compensatory mechanisms to maintain the cardiac output. Long-standing hypertension and atrial fibrillation act as contributing factors for placing strain on the myocardium which can reduce efficiency and impair the ability of the heart to pump the blood (Karakasis et al., 2025). The activation of the sympathetic nervous system leads to reduced response of beta-receptors and adrenaline which facilitate myocardial hypertrophy and contractility, thus increasing heart rate (Malik et al., 2025). In addition, the activation of the Renin-Angiotensin-Aldosterone system (RAAS) through sympathetic drive leads toward fluid retention, vasoconstriction, and increased blood volume, which in turn leads to oedema and congestion (Manolis et al., 2023). The symptoms experienced by Mr Flanders indicate heart failure; however, despite being a progressive condition, it can be managed through lifestyle modifications, pharmacological treatment, and symptom monitoring (Palaparthi et al., 2025).

Nursing Assessment and Diagnosis

ABCDE assessment is a systematic tool for assessment of critically ill patients, which allows nurses to identify the condition and apply effective interventions for management of the issue (Bruinink et al., 2024). Mr Flanders have a clear and open airway; however, respiratory rate is elevated and his oxygen saturation is under the normal range. Tachypnoea highlights respiratory distress due to increased depth, crackles on auscultation, and effort of breathing which is a key symptom of heart failure (Gossman et al., 2024). Mr Flander sits in an upright position at night due to difficulty in breathing while lying down. Grigore et al (2025) depict that orthopnoea indicates toward heart failure which results due to pulmonary congestion and it is considered to be a physiological response for increasing venous return to the heart.

Mr Flander's heart rate and blood pressure are also elevated with atrial fibrillation in ECG, suggesting irregular and rapid rhythm (Nesheiwat et al., 2023). In addition, bilateral oedema, raised JVP, and ejection fraction of 40% are classical presentations of heart failure (Abassi et al., 2022). BNP level is significantly elevated, which indicates increased stress on the heart and presence of cardiac issue (Novack and Zevitz, 2023). Mr Flanders does not have any disability and his body temperature is under normal range. Fatigue, reduced appetite, and emotional distress are also prevalent in heart failure which impose a negative impact on routine activities and reduce adherence to exercise regimes (Pavlovic et al., 2021). Mr Flander consider himself a burden due to reduced energy levels, constant tiredness, and an inactive lifestyle. It highlights that impaired gaseous exchange, fluid retention, active lifestyle, decreased cardiac output, and risk of mental health issues are potential problems addressed by Mr Flanders.

NANDA-I nursing diagnosis of Mr Flanders focuses on decreased cardiac output which is evident by the signs of fatigue, oedema, shortness of breath, EF 40%, and tachycardia. According to Ernstmeier and Christman (2021), NANDA-I diagnoses that activity intolerance

is due imbalance between oxygen supply and demand and oedema is caused by fluid retention, which characterises impaired myocardial contractility. In addition, NANDA-I nursing diagnosis outlines that excess fluid volume is evident by extended JVP, swelling in extremities, and increased blood pressure (NANDA, 2024). Addressing these symptoms can prevent further decompensation and increase quality of life.

Nursing-Sensitive Outcomes

Nursing Outcomes Classification (NOC) is a standardised system for identification of patient outcomes that are sensitive to nursing care (Moorhead et al., 2023). NOC is applied to analyse the expected outcomes of Mr Flanders. The first outcome focuses on decreased cardiac output and increased activity tolerance that can facilitate alignment of heart rate and rhythm in the normal range, improve exercise tolerance, and maintain stable blood pressure (Silva et al., 2023). The rationale for this outcome lies in the fact that improving pumping ability of the heart can improve hemodynamics by providing adequate blood to the body and enhance oxygen utilisation, thus alleviating the symptoms of fatigue and shortness of breath (Demir et al., 2025).

From priority diagnosis of excessive fluid volume, NOC indicators exhibit improved fluid balance which can be determined through reduced oedema in extremities, maintenance of normal respiratory rate and oxygen saturation. Achievement or reduction in swelling is a prominent indicator of resolution of increased fluid volume (Hansen 2021). Fluid balance can facilitate maintenance of normal respiratory rate and oxygen saturation due to proper gaseous exchange (Castera and Borhade, 2023). Moreover, the absence of JVP distention can represent normal central venous pressure, adequate fluid balance, and improvement in heart functions (Senthelal and Maingi, 2023).

Nursing Interventions

Nurses require to decrease the cardiac output through continuous monitoring of vital signs to detect deterioration at an early stage. According to Considine et al (2024), assessment of vital signs is fundamental in nursing care for the management of critical patients as it activates rapid response and provide objective data for treatment intervention. Nurses need to place the patient in the semi-fowler position to reduce preload and improve ventilation as it elevates the head in 45-degree, which allows gravity to pull the diaphragm downward, hence, fostering chest and lung expansion. Increased lung capacity facilitates proper gaseous exchange and oxygenation (El et al., 2021). The research by Wirawan et al (2022) state that semi fowler positioning is an effective intervention for enhancing oxygen saturation in heart failure, which reduces shortness of breath and decreases respiratory rate.

Mr Flanders was prescribed bisoprolol 2.5mg od, ramipril 5mg od, Apixaban 5mg bd, which should be administered by a nurse. Bisoprolol is a beta blocker which can treat high blood pressure and help in the treatment of heart failure by reducing cardiac output through negative chronotropic and inotropic effects (Bazroon and Alrashidi, 2023). Ramipril is an ACE inhibitor that blocks the conversion of angiotensin I to angiotensin II, thus decreasing the releasing aldosterone and retention of salt and water, thereby reducing preload. Dilation of arteries lowers systemic vascular resistance, hence increasing the ability of heart to pump blood (Goyal et al., 2023). Administration of apixaban can prevent blood clotting and reduce the risk of stroke and systemic embolism (Agrawal and Manna, 2024). Nurses require to monitor the side effects to ensure the well-being of the patient.

Nurses should keenly monitor fluid balance by assessing body weight, input and output charting, and physical assessment. Additionally, oedema and lung sounds should be monitored routinely to hinder the progression of heart failure. Dietary restrictions should be maintained

stringently in order to limit intake of fluids and retention of sodium. Diuretics can be administered to enhance excretion of the excess fluid through increased excretion of sodium and water that decreases the blood pressure, hence decreasing symptoms related to heart failure.

The nurses should encourage gentle physical activity in order to enhance venous return, which can help improve circulation and reduce fluid overload in the lower extremities of the patients (Fu et al., 2021). The investigation conducted by LaMonte and Eaton (2021) clearly indicates that increased physical activity through exercise significantly improves the physical abilities of the heart failure patients as well as the overall quality of life by making them more independent. Nevertheless, this should be coordinated with sufficient rest and the division of tasks into small steps in order to ensure the conservation of energy (Ackah et al., 2025). Moreover, the nurses must provide emotional support and reassuring as part of the holistic care that will eventually reduce anxiety and frustration (Akyirem et al., 2022).

Conclusion

The assignment comprises of the case study of Mr. Ned Flanders, who was diagnosed with shortness of breath, oedema, fatigue, and distended JVP. The ABCD assessment tool is utilised to evaluate the objective and subjective findings which point towards chronic heart failure. NANDA-I nursing diagnosis gives priority to decreased cardiac output and increased fluid volume while nursing classification outcomes are expected to normalise heart rate, respiratory rate, rhythm, improve exercise tolerance, stabilise blood pressure, and reduce fluid volume. Nursing interventions concentrate on the application of evidence-based strategies to enhance the quality of life through the control of symptoms. The contribution of nurses is very significant in the provision of holistic and patient-centred care in chronic cardiac diseases through patient education and continuous monitoring to prevent readmission. Dietary modifications such as a low-sodium diet, daily weight monitoring, medication adherence,

graded exercise, and psychosocial support can facilitate management of cardiac health and foster patients' independence and autonomy, thus increasing quality of life and well-being.

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