

Translation Science and Synthesis



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NR 716: Analytic

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Evidence Synthesis: Heart Failure

Heart failure is a convoluted medical ailment where the heart muscles are unsuccessful in pumping enough blood to meet the body's requirements, and treatment management is naturally challenging (Pina et al., 2021; Centers for Disease Control and Prevention [CDC], 2019). Congestive Heart failure can be caused by risk factors that can be modifiable, such as smoking, a high sodium, fat, and cholesterol diet, physical inactivity, and moderate consumption of alcohol intake (CDC, 2023; Mohammadi et al., 2021; Pereira Sousa et al., 2021; Ding et al., 2020). However, other medical conditions such as coronary artery disease, diabetes, hypertension, obesity, and other conditions related to heart disease expose people to a higher risk of developing heart failure (CDC, 2023; Mohammadi et al., 2021; Pereira Sousa et al., 2021; Ding et al., 2020).

Prevention is the most effective approach to avoiding morbidity and mortality from heart failure. Therefore, it is vital to detect cardiovascular disease early to begin proper treatment (World Health Organization [WHO], 2021). Constant social support from providers would buffer patients' anxiety levels and promote treatment adherence and a healthy lifestyle to preserve the quality of life (Singh et al., 2021; Mohammadi et al., 2021; Pereira Sousa et al., 2021; Ding et al., 2020). This paper explores the implications of heart failure at the national and state levels. The intent is to appraise the quality of three research studies and non-research evidence by synthesizing its findings on the provision of provider support through multimedia education with patient teach-back and reflective learning to preserve the quality of life, decrease cardiac anxiety, reduce hospital readmission, and promote self-care management.

Analysis

Congestive Heart failure is considered a global burden of disease, which is one of the leading causes of death worldwide, and management continuously proves to be a challenge

within healthcare. It requires patient knowledge of the disease, diet, symptom management and recognition, medication adherence, and daily weight monitoring (Mohammadi et al., 2021; Pereira Sousa et al., 2021; Ding et al., 2020). Although the heart is failing, it is still pumping, but blood and oxygen levels are reduced, making it difficult to reach other vital organs. With known difficulties of heart failure, readmission into the hospital is high, proving that patients are incapable of managing their conditions at home themselves. Patient education is a critical intervention in managing heart failure (Mohammadi et al., 2021; Pereira Sousa et al., 2021; Ding et al., 2020). Prevalence, incidence, and mortality are the foundational measures of investigation from an epidemic standpoint of any disease, such as heart failure.

Approximately 6.7 million Americans older than twenty years old are diagnosed with heart failure, and its occurrence is anticipated to increase to 8.5 million Americans by 2030 (CDC, 2023). Heart failure is rapidly growing worldwide. Heart failure ranges widely from 1 to 9 cases per thousand person per year, with an incidence and known stability in patients 55 years old or less and 85 years old or greater (Groenewegen et al., 2020). The mortality rate per 100,000 of all races, genders, and ages thirty-five and older had a higher death rate of 675.4/100,000 in African Americans (non-Hispanic) and a lower death rate of 154.8/100,000 in Hispanics at a state level (CDC, 2020; Mujib et al., 2011). At the national level, African Americans had a rate of 571.8/100,000, and Hispanics had a rate of 315.5/100,000 in 2020 (CDC, 2020). In 2011, Alabama was considered one of the states within the southeastern region of the United States with the highest mortality rate, but as of 2023, Mississippi is (Mujib et al., 2011; CDC, 2020).

The growth in the quantity of patients diagnosed with heart failure who experience the substantial burden of the disease is likely to contribute to the high economic cost of heart failure within healthcare. Without improvement and recurrent hospital readmission, the cost of care for heart failure may increase. The yearly cost of caring for patients with heart failure is nearly