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by ABC XYZ

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**Assignment: Evidence-Based Project, Part 3: Advanced Levels of Clinical Inquiry
and Systematic Reviews**

Your Name

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PICOT for Heart Failure and Hospitalization for Heart Failure (HHF)

Evidently, heart failure (HF) is known as a ubiquitous and widespread health issue. It is observed that augmented survival and the aging populace is continually elevating the prevalence of heart failure and turning into a significant burden of hospitalization and cost of healthcare among the patients of HF and cardiovascular diseases. According to the World Health Organization (WHO) (2019), cardiovascular diseases are the most eminent causation of morbidity across the planet, and a rough estimation depicts the figure of 17.9 million people who encountered morbidity because of such health concerns. Cardiovascular diseases enwrap all the blood vessels and heart problems, including cerebrovascular, rheumatic heart disease as well as coronary heart disease, and other similar complications.

The associated risks in such may prone to an exacerbated increase in lipids, glucose, and high blood pressure, and patients may demonstrate an inclination towards obesity. In this regard, health experts contend that such symptoms are spotted effortlessly during primary care check-ups. Timely identification of heart diseases proffers significant chances in improving patients' health conditions and in mitigating the rate of hospitalization, readmission, and premature deaths (WHO, 2019). In this context, the exacerbations in clinical heart disease cases that lead to hospitalization have become a focal occurrence. The intensity of such readmissions is critical that Medicaid Services and the Centers of Medicare are required to condense the payments to the healthcare centers with an excess of one-month readmission for heart failure. The Affordable Care Act implies the underlying payment reduction under the Hospital Readmission Reduction Program (Chamberlain et al., 2018).

Development of PICO Question

In order to evaluate the PICO aspects regarding heart failure and frequent hospitalization for heart failure, the following dimensions are encapsulated.

- **Patients/Population or Problem:** patients of cardiovascular diseases and problem of being hospitalized for heart failure
- **Intervention:** Awareness and heart failure management and other educational techniques.
- **Comparison:** Intervention through different modern medications and healthcare approaches
- **Outcomes:** Promote the instructional and awareness strategies that assist in prevention hospitalization in patients of cardiovascular diseases.

PICO Question

Question: *Do management and educational approaches are effective in mitigating the hospitalization in heart failures?*

Reflection on the Research Process for PICO

Methodology:

The research process for evaluating the evidence for the PICO question above is based on a literature research methodology. For this purpose, four meta-analytical and peer-reviewed journal articles are extracted from four credible healthcare and medical databases.

Keywords:

Heart failure (HF), hospitalization for heart failures, educational approaches for heart failure, cardiovascular diseases, HF patients, heart failure and hospital readmission.

Time Considerations:

In order to sift through contemporary approaches and modern perspectives, all four journal articles are opted from the past ten years. The search through keywords yielded a myriad of articles and reviews, but studies that are the most relevant to PICO question, are considered.

Databases and Journal Articles:

- **Science Direct:** ⁵ *Rehospitalization for Heart Failure: Problems and Perspectives* (2013), by Gheorghiade M, Vaduganathan M, Fonarow GC, Bonow RO.
- **Gale Onefile:** ³ *Association Of Statin Use And Clinical Outcomes In Heart Failure Patients: A Systematic Review And Meta-Analysis* (2019), by Agata Bielecka-Dabrowa, Ibadete Bytyçi, Stephan Von Haehling and other associated authors.
- **Biomedcentral (BMC):** ¹ *Evaluation of a self-management patient education program for patients with chronic heart failure undergoing inpatient cardiac rehabilitation: study protocol of a cluster randomized controlled trial* (2013), by Meng K, Musekamp G, Seekatz B and other associated authors.
- **ProQuest:** ² *Effect of Optimizing Guideline-Directed Medical Therapy Before Discharge on Mortality and Heart Failure*

Readmission in Patients Hospitalized With Heart Failure With Reduced Ejection Fraction (2018), by Yamaguchi T, Kitai T, Miyamoto T and other associated authors.

Article	Methods	Results
Gheorghiade, M. et al. (2013)	<ul style="list-style-type: none"> Analyzes historical data and figures regarding hospitalization for heart failures in the United States. Evaluates patients' characteristics and outcomes. Assessing the strategies for dropping 30-day readmission rates 	<ul style="list-style-type: none"> Absence of evidence-based therapy and subsequent frequencies of heart failure readmission. Patients with HFpEF are more prone to perils of recurrent hospitalization. Clinical facilities are suggested to address other worsening factors that are beyond the scope of clinical congestion. The time scale of intervention, awareness, and team development between medical personnel, patient, and family are imperative in this regard.
Bielecka-Dabrowa, A. (2019)	<ul style="list-style-type: none"> The study searched different databases, including Cochrane Central, Google Scholar, Scopus, EMBASE, and PubMed until August 2018. It compares outcomes of statin and non-statin intervention measures in the patients with heart failure. PRISMA 2009's guidelines are followed. The methodology for analyzing the data is meta-analyses of hazard ratio (HRs). 	<ul style="list-style-type: none"> Seventeen studies are included in deriving the results. Weighted against with non-statin use portrays that statin utilization was interlinked with a lower risk of all-cause mortality.
Meng K. et al. (2013)	<ul style="list-style-type: none"> The study followed a controlled trial in four cardiac-based rehab centers and pivoted the idea of multicenter cluster randomization. The selected group is an educational cluster that included heart failure patients; all these group members are hired for the study within two weeks of starting inpatient cardiac rehabilitation. Primary outcomes are intertwined with self-management and self-reporting of patients. 	<ul style="list-style-type: none"> Results demonstrate a significant positive correlation between self-management interventions and improved health outcomes in patients of heart failure. The thorough and rigorous training of healthcare professionals is indispensable.

	<ul style="list-style-type: none">• Secondary outcomes are associated with behavioral factors and a healthy attitude toward self-management, adherence to medication, and quality lifestyle and satisfactory results of treatment.• Multilevel regression analysis and adjustment of baseline values are used for deriving results.	
Yamaguchi T. et al. (2018)	<ul style="list-style-type: none">• The study analyzes the REALITY-AHF data through post hoc analysis that comprised of 1,682 successive patients of hospitalized for their acute heart failure.• Due to in-hospital deaths and missing data of some patients, the enrolled patients for the study skimmed and remained only 534.	<ul style="list-style-type: none">• The research found out that 83.7 percent of the enrolled patients received β Blocker (BB) at the time of discharge.• Meanwhile, 72.5% of discharged patients receive ACE-I/ARB.• However, during one year, it is observed that seventy patients encountered demises, and 142 patients hospitalized again.

Discussion

Throughout the above-analyzed dimensions, researches, and analyses, it becomes evident that heart failure and hospitalization for heart failures are major hazards and burdens on the healthcare métier. The symptoms of heart failure and cardiovascular diseases are easy to identify through a primary medical evaluation. The implied notion of fatality accelerates the need for addressing the issue on multiple levels and through several interventions.

Conclusion

- Cardiovascular diseases, heart failures and hospitalization, and readmission from heart failure are prevalent health issues not only in the United States but all around the globe.

- HF patients are considered as the largest cluster of patients with repeated hospital readmissions.
- Educational approaches, including self-management, self-reporting, and awareness regarding pursuing a healthy life is essential both for in-patients and outpatients.
- Awareness and educational approaches are also applicable to the relevant medical staff, family, and other interconnected people for the improved health conditions of HF patients and reduced occurrence of hospitalization and readmission.
- In due course, intervention through different medications such as statin is also beneficial. However, such medicines depicted a prominent effect on the rate of mortality, but in readmission cases, the pieces of evidence require more profound research.
- Meanwhile, it is also affirmed that usage of Beta Blocker and ACE-I/ARB also did not impact the cases of readmission and deaths in an effective manner.
- Through selected journal articles, it is suggested that patients of heart failure and other cardiovascular diseases are fragile and necessitate a well-devised combination of contemporary educational approaches and suitable medicines to combat the adversaries of such intricate health conditions.
- Patients' health conditions, recovery mechanisms, learning preferences, and current lifestyle should be considered as determinants of devising a perfect, viable, and feasible plan for the patients.

- Effective strategy and amalgamation of medical and educational intervention can play a vital role in minimizing readmissions and hospitalization in heart failures.

References

- Bielecka-Dabrowa, A., Bytyçi, I., Von Haehling, S., Anker, S., Jozwiak, J., & Rysz, J. et al. (2019). Association of statin use and clinical outcomes in heart failure patients: a systematic review and meta-analysis. Retrieved 17 December 2019, from <http://dx.doi.org.ezp.waldenulibrary.org/10.1186/s12944-019-1135-z>
- Cardiovascular diseases. (2019). Retrieved 17 December 2019, from https://www.who.int/health-topics/cardiovascular-diseases/#tab=tab_2
- Chamberlain, A. M., Dunlay, S. M., Gerber, Y., Manemann, S. M., Jiang, R., Weston, S. A., & Roger, V. L. (2017). Burden and Timing of Hospitalizations in Heart Failure: A Community Study. *Mayo Clinic proceedings*, 92(2), 184–192. doi:10.1016/j.mayocp.2016.11.009
- Gheorghiade, M., Vaduganathan, M., Fonarow, G., & Bonow, R. (2013). Rehospitalization for Heart Failure. *Journal Of The American College Of Cardiology*, 61(4), 391-403. doi: 10.1016/j.jacc.2012.09.038
- Meng, K., Musekamp, G., Seekatz, B., Glatz, J., Karger, G., & Kiwus, U. et al. (2013). Evaluation of a self-management patient education program for patients with chronic heart failure undergoing inpatient cardiac rehabilitation: study protocol of a cluster randomized controlled trial. *BMC Cardiovascular Disorders*, 13(1). doi: 10.1186/1471-2261-13-60
- Yamaguchi, T., Kitai, T., Miyamoto, T., Kagiya, N., Okumura, T., Kida, K., . . . Matsue, Y. (2018). Effect of optimizing guideline-directed medical therapy before discharge on mortality and heart failure readmission in patients hospitalized with heart failure with reduced ejection fraction. *The American Journal of Cardiology*, 121(8), 969-974. doi:http://dx.doi.org.ezp.waldenulibrary.org/10.1016/j.amjcard.2018.01.006

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meta-analysis", Lipids in Health and Disease,
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