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Research Article

Palliative Care Reduces Hospital Readmission Rates for Heart Failure Patients

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Abstract

Heart Failure patients need to make informed decisions about their medical treatment and be told how that treatment will affect their lives. Aggressive medical treatment may increase the number of days a heart failure patient lives, while decreasing the quality of life for those days. Palliative care focuses on the quality of a patient's life, and it is not hospice. A literature survey shows that offering palliative care to heart failure patients significantly reduces hospital readmission rates and drastically reduces the medical costs of heart failure patients. In spite of these benefits, less than three percent of US heart failure patients are offered palliative care. This paper surveys the literature on palliative care's effects on hospital readmission rates for heart failure patients, recommends that a palliative care information sheet be included in the discharge papers for all heart failure patients, and provides a sample information sheet that hospitals can adopt, improve, or adjust for their specific situation and populations.

Keywords: Heart Failure; The quantity versus the quality of life; Palliative care; Hospital readmission rates

Introduction

Nurses need to seriously consider trade-offs between the quantity and quality of their patients' future. This trade-off is especially relevant for heart failure patients who can have the quantity of their lives extended by aggressive medical treatment which tends to simultaneously reduce the quality of their lives. Offering palliative care to heart failure patients raises this quantity versus quality trade-off and results in a statistically significant drop in hospital readmissions. Maraey, et al. [1] states that the mean dollar cost of a Heart Failure (HF) patient being readmitted to the hospital is US$ 43,265. Hospital readmissions cost the patient money, decrease the quality of a heart failure patient's life, and cause hospitals to divert resources that could be allocated to other patients. Nationally 23% of heart failure patients are readmitted to the hospital within 30 days, but this rate varies with gender, smoking, ethnicity, etc. In spite of the value of palliative care, only 2.2% of people in the National Readmission Database had had palliative care.

This paper adds to the literature in three ways. First, this paper surveys the literature on palliative care for heart failure patients and hospital readmission rates. Second this paper recommends a very simple, cheap way to ensure that palliative care is offered to heart failure patients; specifically, putting a palliative care

information sheet into the discharge packages of all heart failure patients. Although this is an obvious solution, we have not seen it in the literature. Third this paper offers a sample palliative care information sheet which hospitals are welcome to adopt, improve, or adjust for their specific situations.

Materials and Methods

Our PICO question was, "In adult heart failure patients, does palliative care education compared to standard patient care reduce hospital readmission rates? Searching PubMed, CINAHL via EBSCO, ProQuest, and Cochrane using "heart failure," and "palliative care," and "readmissions" produced a total of 130 articles (not double counting articles that multiple searches produced would reduce this number to approximately 60). We used 9 of these articles. Most of the 51 articles eliminated were ones that merely recommended using palliative care to reduce heart failure readmission rates instead of studying how palliative care affects heart failure readmission rates.

Results

The literature shows that palliative care reduces rehospitalizations. The meta-analysis of Diop, et al. (2017) [2] of three studies found that home based palliative care consults decreased the risk of rehospitalization by 42 percent (odds ratio: 0.58, 95% confidence interval = 0.44 to 0.77). The literature survey conducted by DeGroot, et al. (2020) [3] found three studies that examined how palliative care affected readmission rates, and all three found statistically significant decreases in rehospitalization after palliative care interventions. Mentz, et al. (2018) in a randomized control trial at a single hospital found a non-statistically significant 50 percent drop in non-cardiovascular readmissions within six months in the palliative care group relative to the usual care group. However, the authors had only 150 patients (75 for the palliative care group and 75 for the control group), and they hypothesize that if they had had 800 patients they would have found a statistically significant fall in readmissions due to palliative care. In a non-randomized study at a single center, [4] found that 50.8% of patients that received palliative care consults were readmitted to the hospital within 30 days in contrast to only 36% of patients without palliative care consults. They hypothesize that this perverse result is due to omitted social variables. This was the only study we found that produced a perverse result.

All five of the correlational studies found statistically significant falls in rehospitalizations for palliative care heart failure patients compared to those without palliative care. [5] used data from the Veterans Administration Peer Review to conduct a correlational study which matched patients' characteristics, and they found that 30.9% of patients with palliative care had multiple readmissions versus 40.3% of patients without palliative care having multiple readmissions ($P < 0.001$). The remaining four studies used the Nationwide Readmission Database to conduct correlative analyses. [1] found that 15.6 percent of nonagenarian heart failure patients had 30-day hospital readmissions where the average cost of a readmission was US$ 43,265. Those with palliative care were 73% less likely to be re-admitted in 30 days (odds ratio = 0.27, 95% confidence interval = 0.21 to 0.34, $P < 0.001$). Feng, et al. (2021) [6] found that palliative care reduced 30-day readmission rates for heart failure patients by 53.8% (odds ratio = 0.462, 95% confidence interval = 0.408 to 0.524, $P < 0.001$). Yazdanyar, et al. (2022) [7] found that palliative care reduced 30-day readmission rates by 73% for patients discharged to facilities, by 64% for those discharged to homes with home health care, and by 22% for those just discharged to home. Wiskar, et al. (2017) [8] used 2,282 matched pairs to show that 9.3% of those with palliative care were readmitted with heart problems within 9 months versus 22.4% readmitted for heart problems without palliative care ($P < 0.01$). Readmissions for any cause were 29.0% for those with palliative care versus 63.2% for those without palliative care ($P < 0.01$). Average hospital charges during the 9 months was US$ 23,200 for those with palliative care versus US$ 77,643 for those without palliative care ($P < 0.01$). In spite of the value of palliative care, only 2.2% of people in the National Readmission Database had palliative care [9].

Discussion

Heart failure patients need to be made aware of trade-offs between the quantity and quality of their futures. Aggressive medical treatments may increase the number of days that heart failure patients live at the cost of reducing the quality of those days. One way to get patients to start thinking about this trade-off is informing them about palliative care. The literature clearly shows that offering palliative care to heart failure patients significantly reduces hospital readmissions. We suggest (1) that hospitals make offering palliative care to heart failure patients a policy requirement and (2) that hospitals put a palliative care information sheet into the discharge packages for all heart failure patients. If a given hospital is concerned about nurse buy-in, then having the nurses design the palliative care information sheet may help. If buy-in is not a potential problem, then hospitals are welcome to use the information sheet suggested at the end of this article, improving it or adjusting it for their individual situations and patient populations (at the very least, information on how to get additional information on palliative care should be added to the information sheet). Even if a hospital adopts our recommended information sheet, we suggest that the nurses giving discharge papers to heart failure patients be asked periodically if they had any problems with the information sheet and/or can suggest any improvements in it.

Conclusion

Offering palliative care to heart failure patients significantly reduces hospital readmissions and costs. In spite of the benefits from offering palliative care to heart failure patients, only 2.2 percent of heart failure patients in the USA are offered palliative care. Many hospitals have palliative care teams for their terminal cancer patients. It would be relatively easy to extend the services of existing palliative care teams to heart failure patients. Furthermore, informing heart failure patients about palliative care can be as simple and as cost effective as including an information sheet on palliative care into their discharge packets. A possible information sheet to include in discharge packages for heart failure patients is as follows:

Quality verses the Quantity of Your Future

Aggressive medical treatment may increase the number of days you live but decrease the quality of those days. Palliative care is an option that focuses on the quality of your future, not the quantity.

Palliative care is not Hospice. Hospice is for people whose doctors believe they will live six months or less; palliative care is for anyone with a terminal illness regardless of how long they are expected to live. Both hospice and palliative care focus on increasing the quality of a person's end of life; however, under hospice no efforts can be made to cure the patient whereas efforts to cure the patient are not prohibited under palliative care.

Palliative care increases the quality of a heart failure patient's life, reduces their medical expenses, and reduces readmission rates to hospitals. For example, one researcher found that 9.3% of those with palliative care were readmitted with heart problems within 9 months versus 22.4% readmitted for heart problems without palliative care. Readmissions for any cause were 29.0% for those with palliative care versus 63.2% for those without palliative care. Average hospital charges during the 9 months was US$ 23,200 for those with palliative care versus US$ 77,643 for those without palliative care (https://pubmed.ncbi.nlm.nih.gov/28741859/ see also https://pubmed.ncbi.nlm.nih.gov/36052818/).

For more information on palliative care contact: (insert information on your hospital's palliative care team, social worker, or chaplain)

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Competing Interests

There are no competing interests to discuss or declare.

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Author Contributions

Luke Leightner was responsible for the first draft of this paper. Jonathan Leightner proofread all drafts of this paper, selected papers from the literature survey for Luke to consider, and took Luke's thesis and rewrote it in the form of an academic article that fit the guidelines and style of this journal.

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