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Year Book of CARDIOLOGY – 2019

Heart Failure

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Forewords
Stefan D Anker
Inder S Anand

JAYPEE

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Section 2

Heart Failure Clinics

Section Editor: Sandeep Seth

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ARTICLE 1

Introducing Nurse-led Heart Failure Clinics in Swedish Primary Care Settings

Liljeroos M, Strömberg A. Introducing nurse-led heart failure clinics in Swedish primary care settings.
Eur J Heart Fail. 2019;21(1):103-9.

*Abstract**

Background: Clinical guidelines recommend that patients with heart failure (HF) should receive structured multidisciplinary care at nurse-led HF clinics, so that treatment can be optimized and preventable readmissions can be avoided. Presently, about all Swedish hospitals have HF clinics with specialist-trained nurses, but there is paucity of HF clinics in primary care (PC).

Aims: In this study, there were 2-fold aims—first, to assess the effects of systematically implementing nurse-led HF clinics in PC settings with respect to evidence-based HF treatment and hospital healthcare utilization, and second, to find experience of patients of HF clinics in PC.

Methods and Results: This study had a pre-post design. Annual measurements, related to in-hospital healthcare consumption and medical treatment, were taken between 2010 and 2017. We compared data from 2011 to 2017 after implementation of HF clinics in PC in one county council Sweden with baseline data collected before implementation in 2010. There was a significant reduction in the number of HF-related hospital admissions by 27%, HF hospital days by 27.3% ($p < 0.001$), and HF emergency room visits by 24% ($p < 0.001$) after the implementation of HF clinics in PC. In addition, patients were medically treated as per guidelines to a higher extent; there was satisfaction among patients with the care they got at the PC HF clinic.

Conclusion: Nurse-led PC HF clinics appear to be efficient in decreasing the need for in-hospital care and providing person-centered care of high quality.

COMMENT

This is a simple elegant study showing the benefit of about 25% reduction in admissions and emergency room visits by introducing heart failure clinics in primary care.

***Redrafted abstract**

ARTICLE 2

Nurse-led Heart Failure Clinics are Associated with Reduced Mortality but not Heart Failure Hospitalization

Savarese G, Lund LH, Dahlström U, et al. Nurse-led heart failure clinics are associated with reduced mortality but not heart failure hospitalization.
J Am Heart Assoc. 2019;8(10):e011737.

*Abstract**

Background: In heart failure (HF) guidelines, follow-up in a nurse-led HF clinic is recommended. However, its association with outcomes is still under controversy, as past studies have included few and highly selected patients. Therefore, large studies of "real-world" samples are required. We aimed to evaluate the independent predictors along with prognosis of planned referral to nurse-led HF clinics.

Methods and Results: In this study, data from the SwedeHF (Swedish HF Registry) was analyzed by using multivariable logistic regressions for identifying independent predictors of planned referral to a nurse-led HF clinic. Multivariable Cox regressions were used for testing associations between planned referral and outcomes (HF hospitalization, all-cause death, and their composite). A follow-up in a nurse-led HF clinic was planned for 39% of 40,992 patients.

The independent characteristics that were found to be associated with planned referral included short duration of HF, clinical markers of more severe HF, like higher New York Heart Association class, lower ejection fraction, and N-terminal pro-B-type natriuretic peptide, and low blood pressure, as well as male sex, cohabitating versus living alone, more use of HF treatments, and fewer comorbidities. Following adjustments, the planned referral to nurse-led HF clinic was observed to be associated with decreased mortality and HF hospitalization/mortality, but not HF hospitalization alone.

Conclusion: In this nationwide registry, 39% of our recognized HF cohort was planned to be referred to nurse-led HF clinic. Planned referral showed more severe HF, and also family- and sex-related factors; it was independently associated with reduced risk of death, but not of HF hospitalization.

COMMENT

This is a referred high-risk population and planned referral leads to lower mortality and higher use of medications.

***Redrafted abstract**

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ARTICLE 3

An Outpatient Heart Failure Clinic Reduces 30-day Readmission and Mortality Rates for Discharged Patients: Process and Preliminary Outcomes

Koser KD, Ball LS, Homa JK, et al. An outpatient heart failure clinic reduces 30-day readmission and mortality rates for discharged patients: Process and preliminary outcomes.
J Nurs Res. 2018;26(6):393-8.

*Abstract**

Background: The establishment of first outpatient heart failure clinic (HFC) in Western New York was done in a large private cardiology practice with the objective of decreasing 30-day all-cause rehospitalization and inpatient mortality.

Purpose: We aimed to evaluate the process and outcomes of patients in this independent outpatient HFC. Our specific aims were—(1) to explain the outpatient care strategies used; and (2) to evaluate whether the HFC decreased 30-day all-cause rehospitalizations and inpatient mortality by comparing HFC data with census data.

Methods: In this study, a retrospective chart analysis was done on 415 adults who were included in the target HFC after hospitalization for heart failure (HF). Using frequency comparison and descriptive statistics, data were summarized. One-sample chi-square tests were performed for testing observed values in the study sample against the census data.

Results: Patients in HFC were less likely experienced a hospital readmission within 30 days of discharge (69% reduction within the study period, $p < 0.001$).

Patients were observed acutely following discharge, received multiple medication adjustments, and telephonic follow-up was continued. There were statistically lower inpatient mortality rates in HFC (1.2% vs. 11.6% national average, $p < 0.001$), which is probably a result of the HFC care regimen and referrals to palliative care (17%).

Conclusion: The findings of this study show the significance of establishing an outpatient HFC in association with hospitals, which is aimed at decreasing the 30-day all-cause readmissions and inpatient mortality, along with referral for palliative care when indicated.

COMMENT

The design of this study is useful to structure a program for any hospital, as it covers the care from hospital admission to 60 days postdischarge. The heart failure management team covering a group of hospitals is contacted within 48 hours of admission and this team keeps eyes on the patient charts and the patient till discharge and is in touch with the patient till 60 days postdischarge. This study shows reduction in morbidity and mortality.

***Redrafted abstract**

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Year Book of CARDIOLOGY – 2019 *Heart Failure*

Key Features

- The *Year Book of Cardiology – 2019 Heart Failure* brings to you a collection of meticulously chosen articles focusing on the recent advances in the management of Heart Failure
- Articles selected from various peer reviewed journals that were published in the last 12-month period
- Each article has been reviewed by subject reviewers who have written comments on value of the article, previous knowledge on the subject, what the article adds to the prevailing knowledge and practices, strong points and weaknesses of the article and other similar observations
- The book comprises nine major sections highlighting the clinical experience of the reviewers
- A must read book for cardiologists, physicians, and postgraduate students.

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