Multidisciplinary approach reduced readmissions in patients with CHF


Objective
To determine the effect of a multidisciplinary approach to heart failure care in elderly patients who were recently hospitalized for congestive heart failure (CHF).

Design
Randomized controlled trial with 90-day follow-up.

Setting
University medical center in Missouri, USA.

Patients
282 patients ≥70 years of age (mean age 79 y, 63% women, 55% black) who were hospitalized for CHF between July 1990 and June 1994. Exclusion criteria were plans to enter a long-term care facility, dementia or psychiatric illness, terminal illness, expected survival <3 months, or refusal to participate. Follow-up was complete.

Intervention
Patients were allocated to a multidisciplinary intervention (n = 142) or to conventional care (n = 140). The intervention consisted of intensive in-hospital educational sessions about CHF given by a cardiovascular nurse, individualized dietary assessment and instruction by a diettian, social services consultation to facilitate discharge, medication recommendations by a geriatric cardiologist, and follow-up after discharge with home visits and telephone calls. Patients in the conventional care group received standard treatments and services ordered by their primary physician.

Main Outcome Measures
The primary outcome was survival for 90 days without readmission. Secondary outcomes were number of readmissions for any cause, number of readmissions for CHF, number of days spent in the hospital during follow-up, quality-of-life scores, and overall cost of care.

Main Results
Analysis was by intention to treat. 91 patients (64.1%) in the multidisciplinary care group survived for 90 days without readmission compared with 75 patients (53.6%) in the conventional care group (P = 0.09). The multidisciplinary approach to care led to fewer readmissions for any reason at 90 days than did conventional care (53 vs 94 readmissions, P = 0.02) and fewer readmissions for CHF (24 vs 54 readmissions, P = 0.04). Patients in the multidisciplinary care group spent fewer mean days per patient in the hospital than did patients in the conventional care group (3.9 vs 6.2 days, P = 0.04). For 126 patients who were given the Chronic Heart Failure Questionnaire, quality-of-life scores improved more in patients in the multidisciplinary care group than in patients in the conventional care group (mean change in score 22.1 vs 11.3, P = 0.001). The overall cost of care per patient-month of follow-up was $153 less in the multidisciplinary care group.

Conclusion
A multidisciplinary approach to care for elderly patients recently hospitalized for congestive heart failure reduced the number of hospital readmissions and the number of days spent in the hospital and improved quality of life but did not affect 90-day readmission-free survival.

Source of funding: National Heart, Lung, and Blood Institute.

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