SCIENCE-IN-BRIEF

TURNING SCIENCE INTO ACTION

Cost of Informal Caregiving for Patients with Heart Failure

The following is a synopsis of "Cost of Informal Caregiving for Patients with Heart Failure," published in January 2015 in *American Heart Journal*.



What is already known on this topic?

In the United States, heart failure is a serious public health issue among the elderly. In 2012, the prevalence of heart failure was 2.42% in adults (5.8 million patients) and was expected to increase 46% by 2030, resulting in 8 million or more adult heart failure patients. The mortality rate of patients with heart failure in the United States remains high; almost half of patients diagnosed with heart failure will die within 5 years. Moreover, surviving patients with heart failure have high burden because of disabilities compared to those without heart failure. Total cost of heart failure in adults 18 years or older, including direct medical costs and productivity loss, was \$31 billion in 2012. Patients with heart failure often require a substantial amount of informal caregiving, which is in-home assistance with any activities of daily living (ADLs) or instrumental activities of daily living (IADLs) provided by family members or nonpaid nonfamily members. The rate of use and the cost of informal caregiving associated with heart failure have not been well studied.

What is added by this article?

This article provided information about the use and cost of informal caregiving for patients with heart failure by analyzing data from the 2010 Health and Retirement Study (HRS). The HRS is a biennial longitudinal household survey for monitoring the health and well-being of people who are near or older than retirement age in the United States.

The authors found that heart failure patients used about 1.6 more hours of informal caregiving per week than those who did not have heart failure. The annual cost to the nation of the informal caregiving associated with heart failure is \$3 billion. The informal caregiving cost increases the current estimate of indirect cost of heart failure by 35%. The estimates suggest a high economic burden due to informal caregiving for patients with heart failure. The cost of informal caregiving for patients with heart failure is higher for non-Hispanic blacks. The average per patient informal caregiving cost associated with heart failure for non-Hispanic black patients with heart failure (\$1,988 per year) is triple the cost for non-Hispanic white patients with heart failure (\$699 per year). Cultural traditions, strong informal caregiving networks, or low access to formal caregiving may cause the high informal caregiving burden among non-Hispanic blacks.

Table. Heart Failure-Associated Informal Caregiving Use and Cost among People Aged 50 or Older, by Race

	Total population (n=19,762)	Non-Hispanic white (n=12,849)	Non-Hispanic black (n=3,744)
Heart failure-associated use of informal caregiving (hours/week) ^a	1.625	1.359	3.866
Annual informal caregiving costs associated with heart failure			
Per patient estimates (\$) ^b	836	699	1,988
National estimates (\$ billion) ^c	3.030	1.950	0.998

^aEstimated results are from survey weighted two-part models with adjustment of gender, age, marital status, education, self-reported chronic conditions (hypertension, diabetes, cancer, chronic lung disease such as chronic bronchitis or emphysema, stroke, psychiatric disorders, and arthritis), and usage of formal caregiving.

What are the implications of these findings?

The high economic burden of informal caregiving reinforces the importance of cardiovascular disease (CVD) prevention. The cost of informal caregiving associated with heart failure can be significant among older heart failure patients. The results increase our knowledge about the high cost of heart failure, and could be used in future cost-effectiveness studies of interventions.

When informal caregiving costs are not included in cost-ofillness estimates, heart failure costs among non-Hispanic blacks may be highly underestimated and contribute to inaccurate assessment of racial/ethnic disparities in total heart failure costs. Racial disparities in informal caregiving costs should be considered when developing intervention programs to reduce racial disparities in heart failure burdens.

Resources

Heart Failure Fact Sheet

http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/docs/fs_heart_failure.pdf

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CDC

National Center for Chronic Disease Prevention and Health Promotion

Division of Heart Disease and Stroke Prevention

^b Per patient annual informal caregiving costs associated with heart failure were estimated by using total weekly hours associated with heart failure multiplied by 52 weeks and median wages of health aide workers (\$9.89/hour) from the 2010 U.S. Labor Statistics.

c National estimates were derived by per capita annual informal caregiving costs multiplied with national estimate of patients with HF aged 50 and older from 2010 RS.