Cardiac rehabilitation saves lives

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Coronary heart disease (CHD) is the leading cause of death worldwide and a major driver of medical and economic costs, especially among older adults. It has long been established that cardiac rehabilitation improves survival, at least in middle-aged, low- and moderate-risk white men. Now a large Brandeis University-led study published in the *Journal of the American College of Cardiology* reports that older cardiac patients benefit as much from cardiac rehab as their younger counterparts.

Worldwide, in 2004, 7.2 million people died from CHD, while in the United States alone, more than 13 million people suffered from CHD, and almost half a million died from heart disease in 2003. Moreover, Americans aged 65 and older account for more than 55 percent of heart attacks and 86 percent of CHD deaths.

"The good news is that patients who use cardiac rehab live longer than those who do not use it, regardless of their clinical diagnosis, gender, race, or socioeconomic background" said Dr. Jose Suaya, lead author and visiting scholar at the Heller School for Social Policy and Management at Brandeis University. The study showed that "patients with different clinical backgrounds—heart attacks, coronary bypass operations, and even congestive heart failure—all had lower mortality when using cardiac rehab," Dr. Suaya asserted.

The study examined mortality in 601,099 Medicare beneficiaries who were hospitalized in 1997 for heart disease or bypass surgery and followed up through 2002. The study used three different statistical techniques to compare mortality between patients who used cardiac

rehab and those who didn't. Overall, within a span of five years, mortality rates were 21 percent to 34 percent lower in older adult patients who used cardiac rehab. Cardiac rehab is a covered benefit under Medicare.

"Despite the significant benefits of cardiac rehab, only 12 percent of these patients actually took advantage of it," said Professor Donald Shepard, a health economist at the Heller School for Social Policy and Management at Brandeis. The regimen typically includes aerobic exercise and lifestyle counseling to reduce cholesterol, weight, and stress. The study found that patients who engaged in more than 24 sessions were an additional 19 percent less likely to die over five years than patients who used 24 sessions or fewer.

The findings are magnified among the extreme elderly and patients with other diseases, such as diabetes, on top of their heart disease. These types of patients were even less likely than others to participate, but those who did attend obtained especially large gains from cardiac rehab.

"This study should be a wake-up call to cardiac patients, their families, and their physicians that cardiac rehab can extend life and improve the quality of life, even in older people," said Dr. William Stason, senior scientist at the Heller School.

"The evidence is clear. Cardiac rehab saves lives but it is severely underused," noted Dr. Philip Ades, Professor of Cardiology at the University of Vermont and a coauthor of the study.

"The consistency of findings among the study's methodologies increases the reliability of the findings," observed Prof. Sharon-Lise Normand of Harvard Medical School and Harvard School of Public Health, another co-author of the study.

"More coronary patients should use cardiac rehab. Perhaps one way to achieve this would be to require hospitals and physicians to report rates of referrals and use of this service as quality indicators of their performance," Dr. Suaya and coauthors concluded.

Source: Brandeis University (news : web)