



1725 I Street NW • Suite 510 • Washington, DC 20006
Tel 202-659-0599 • Fax 202-659-0709 • www.asn-online.org

Contact: Shari Leventhal: 202-416-0658, sleventhal@asn-online.org

REVIEW SUPPORTS INCREASED RISK OF DEATH WITH CHRONIC KIDNEY DISEASE

Washington, DC (Wednesday, June 7, 2006) — Studies consistently show an elevated risk of death for people with chronic kidney disease (CKD), with mortality rate rising "exponentially" as the level of kidney function declines, reports a review in the July *Journal of the American Society of Nephrology*.

"Our study gives a comprehensive estimate of the additional risk of death experienced by people with kidney disease," comments Dr. Marcello Tonelli of University of Edmonton, lead author of the new review. "This information may be useful for other researchers and policy makers."

Dr. Tonelli and his fellow researchers reviewed available research studies on the relationship between CKD and the risk of death—death from any cause as well as death from cardiovascular disease. The analysis focused on "non-dialysis-dependent" CKD, in which the loss of kidney function is not yet severe enough to require dialysis.

The review included 39 studies providing information on more than 1.3 million patients with CKD. Although estimates varied, 93 percent of the studies found that CKD patients were at higher risk of death. Before adjustment for other factors, mortality risk was up to five times higher for CKD patients.

In 16 studies with suitable data, the absolute risk of death increased exponentially with decreasing kidney function. With statistical adjustment for other factors—including the presence of heart disease—the risk of death attributable to CKD decreased.

However, CKD was still a significant risk factor for death. For example, over a median follow-up of 5 years, the mortality rate was 12 percent for patients with CKD in the "mild" range—90 percent

MORE

higher than in people with normal kidney function. This risk increased to 17 percent for patients with moderate CKD (more than twice the normal risk) and 25 percent for those with severe CKD (more than four times normal).

Chronic kidney disease is a known risk factor for death from cardiovascular diseases. The data suggested that 58 percent of all CKD-related deaths were from cardiovascular causes.

Patients with CKD have gradual, irreversible declines in kidney function, bringing an increased risk of many different health problems, including cardiovascular disease, cancer, and infections. Since CKD affects nearly 10 million Americans, even a small increase in mortality risk is likely to have a major impact on the population.

Consistent with current guidelines, this research review shows a significant increase in the risk of death among patients with CKD. Especially for death from cardiovascular diseases, the mortality risk attributable to CKD rises rapidly as kidney function levels fall. Dr. Tonelli and colleagues urge further study to develop and evaluate new approaches to identifying patients with CKD, and to assess the ability of intensive treatments to prevent cardiovascular disease and other adverse outcomes.

The ASN is a not-for-profit organization of 9,500 physicians and scientists dedicated to the study of nephrology and committed to providing a forum for the promulgation of information regarding the latest research and clinical findings on kidney diseases.

#