

## **Costs of home hemodialysis offset by better health, fewer hospitalizations**

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Daily hemodialysis administered in patients' homes is associated with better health outcomes compared with peritoneal dialysis, according to an article in the October issue of the American Journal of Kidney Diseases, the official journal of the National Kidney Foundation.

As a result, the extra cost of providing in-home hemodialysis is balanced out by lower expenditures for medications and hospital admissions, physicians at a health maintenance organization in southern California report.

In addition to the convenience, "many reports indicate that people using daily home hemodialysis take less medication to control blood pressure and anemia, feel better during dialysis and less 'washed out' afterward, and have more energy for daily tasks," said Dr. Kerry Willis, senior vice president for scientific activities at the National Kidney Foundation.

However, it has been suggested that better health outcomes may simply be the result of healthier patients opting for home treatment.

In their article, Dr. Victoria A. Kumar and her associates at the Southern California Permanente Medical Group in Los Angeles tested this theory by comparing one group of patients treated with daily home hemodialysis with a group of patients treated with peritoneal dialysis. Home dialysis was performed on average 5.4 times per week.

Dr. Kumar's group treated the 22 patients in the daily hemodialysis group and the 64 in the peritoneal dialysis group for at least 6 months between 2003 and 2007. The groups were comparable in age, the number of patients with diabetes, and causes of kidney failure.

Despite these similarities, patients treated by peritoneal dialysis spent nearly twice as many days each year in the hospital compared with patients treated with home hemodialysis (average 5.6 days/patient-year versus 3.3 days/patient-year).

Those treated by daily home hemodialysis were also able to reduce the number of medications required to keep their blood pressure under control, and had better nutritional status than they did prior to starting treatment, as shown by higher serum albumin levels.

Dr. Kumar and her associates point out that their organization could support the program of home hemodialysis because the cost of equipment, supplies, and patient training was offset by lower expenditures for hospital care and medication. Unfortunately, many patients do not have the option of home dialysis because Medicare does not fully reimburse health care providers for the costs associated with such a program and not all dialysis centers offer education and training for home hemodialysis.

"If the costs of providing more frequent hemodialysis treatments do not pose a financial burden on the Medicare system," Kumar said. "The modality should be freely available to motivated patients with end-stage renal disease."