Nutritional intervention strategies provide an alternative, conservative approach to management of chronic kidney disease (CKD)—allowing patients at least the possibility of delaying or avoiding dialysis, according to a comprehensive review published this month in *The New England Journal of Medicine*.

While questions remain, an analysis of the best available research evidence supports the concept of using a low-protein diet for conservative management of CKD—including a significantly lower risk of progression to end stage renal disease.

“A low-protein diet appears to enhance the conservative management of non-dialysis dependent CKD and may be considered as a potential option for CKD patients who wish to avoid or defer dialysis initiation and to slow down the progression of CKD,” said Kamyar Kalantar-Zadeh, MD, MPH, PhD, of the University of California Irvine.

Data Support Low-Protein Diet for Conservative Management of CKD

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Major new review of nutritional management in CKD

Of course, the notion of a low-protein, low-salt diet for patients with kidney disease is

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**Inside**

**Kidney Week 2017**
The latest on blood pressure and kidney disease and dietary habits and kidney disease. Also, new information on proton pump inhibitors and how exercise during dialysis may reduce length of stay for subsequent hospitalizations.

**Policy Update**
Medicare intermediaries target dialysis sessions of >3 times per week.

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Gestational diabetes linked to higher CKD risk in black women.

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A case of acute kidney injury.

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were transported for dialysis at Fresenius and Atlantis facilities affiliated with their usual provider, Kopp said. “They can quickly loop patients back into what they are used to,” he said.

Volunteers including nurses, student nurses, and mental health professionals helped provide care for the patients at the shelter. The Federal Emergency Management Agency also hired emergency medical technicians to assist.

“Ideally, you vet [volunteers] very carefully,” said Kopp. “My experience with Hurricane Katrina is that it is important to check their backgrounds.”

Unfortunately, the providers and patients faced numerous challenges. It was a struggle to get patients’ medications. Patients’ prescriptions and medical histories had to be entered anew each time they were moved to a new facility with a new electronic medical system.

“Nothing in a disaster ever goes as planned,” Kopp said. So he and his team just had to do what they could to make things work better each day.

“Then Maria appeared on the radar,” Kopp said. A flight was quickly chartered to take the patients to Florida International University in Atlanta now hosts 30 of the patients. “By design, buildings would not survive wind speeds of 185 miles per hour (mph) were simply too many for residences built to withstand 125 mph winds. Even hospitals, built to withstand 175 mph winds, faced devastation.

“Our dialysis unit was flooded and windows were shattered in the hospital’s intensive care unit. The electronic health records system was down. The islands only nephrologist was unable to return for 2 months. The UK military restored water, but power was unreliable and patients’ dialysis sessions were frequently interrupted.

There were also no accommodations available for patients left homeless by the storm or those who had to ferry from nearby islands, he said. One patient began living in a pharmacy to dig through the rubble of a pharmacy to access the next shipment of medications.

“By design, buildings would not survive wind strength,” he said.

“Looking forward,” said Kopp. “We need to take disaster management seriously and make those preparations paid off.

“They can quickly loop patients back into what they are used to,” he said.

One of the biggest problems Tattersall faced was the complete lack of communications infrastructure left on the island. He relied on a GPS device to relay messages by text back to the UK and struggled to reliably connect with anyone on the island.

“Our communication is dependent on cell phones, but those are quite vulnerable,” he said.

Coordination among the International Society of Nephrology, ASN, and Tattersall helped secure the first shipment of the medications needed for kidney patients on the island. Rodgers said ASN, ISN, and Tattersall held daily calls, and ASN tapped its members and US institutions for help. For example, the University of Miami helped acquire the medications and brought them to the airport. With the help of a pilot, Tattersall’s brother then took the supplies to Tortola, Direct Relief, a US nonprofit, handled the next shipment of medications.

In the immediate aftermath of the storm, Tattersall met 2 patients with kidney transplants who couldn’t get their immunosuppressant medications. Local police officers dug through the rubble of a pharmacy to find the medications, he said. The ASN team also helped connect prospective kidney transplant patients with their transplant centers in the US and UK, so these patients wouldn’t miss out if a transplant became available.

Tattersall emphasized the importance of reliable methods of communication and “the need for focused aid informed by people in the disaster area.”

Harvey headaches
In Houston, Hurricane Harvey dropped a record 51 inches of rain, leaving much of the city underwater. For dialysis providers in the area, like Stephen Fadem, MD, medical director of the Houston Kidney Center Integrated Service Network at DaVita, advance preparations paid off.

In the days prior to the storm, Fadem and his colleagues made disaster plans and started educating patients about how to protect themselves. For example, patients were instructed on what to eat, not to overhydrate, and to have a “go-bag” ready with medications and medical information in case they were displaced. Patients received an extra dialysis session prior to the storm.

His organization’s main dialysis unit was on higher ground and equipped with a backup water system and generator. These features and having 10 staff members staying at a nearby hotel allowed the center to continue providing care for their patients and those who arrived from emergency shelters.

“Our dialysis unit waiting room looked like a bus station,” he said. “I had never seen anything like this in a dialysis center.”

Dialysis sessions were administered on a first-come, first-served basis and truncated to 2 hours to accommodate the increased demand. Ten staff members proved to be too few, and additional staff were brought in within a couple of days.

These efforts and “equal efforts” by other dialysis chains in Houston helped prevent a worse disaster, according to Fadem.

“We have a lot to learn,” he said. “We did well, but [our disaster response] can be improved.”

Advance preparations are critical, Fadem said. For example, his center was stocked with food, medications, and a gasoline truck. Staff and patients need curfew letters. Patients need a list of emergency numbers to call. For future disasters his team will work to have more multilingual patient education available, more staff nearby, and better patient records, including information about hepatitis B status.

“The most important take-home message is that this probably will happen again,” Fadem said. “We need to take disaster management seriously and make it part of our daily routines.”

Preventing infections is essential for patient safety.

How many days since your last infection?

NTDS and CDC’s Making Dialysis Safer for Patients Coalition have created a new resource in the fight to eliminate bloodstream infections.

The "Days Since Infection" Poster raises awareness about bloodstream infections in your dialysis facility.

It provides immediate feedback to front line staff to target zero preventable infections.

The poster is available in two sizes and you have the option to add your organization’s logo. Laminated copies can be ordered for free at www.cdc.gov/dialysis/clinician/index.html