Impact of Community Health Representative-Led Patient Activation and Engagement on Home-Based Kidney Care

What was the research about?
More than 30 million people in the United States have kidney disease. With this health problem, people's kidneys stop working well or don't work at all. It can be hard to manage kidney disease for people who have trouble getting health care.

Care may not be easy to get for the Zuni Indians of the Zuni Reservation in rural New Mexico. Getting to the health clinic can be hard. People often wait a long time to get the care they need.

In this study, the research team wanted to learn if an at-home education program would help Zuni adults with kidney disease have better knowledge, skills, and confidence to manage their illness. The team also looked at whether the program helped Zuni adults improve their quality of life and reduce risk factors for kidney disease. Risk factors include being overweight and having high blood sugar and high blood pressure.

The study compared a group of Zuni adults in the at-home program with a group of adults who were not in the program and who received care at the Indian Health Services, or IHS, clinic.

Who was in the study?
The study included 125 Zuni Indian adults living with kidney disease on the Zuni Reservation in rural New Mexico. Of these, 98 completed the 12-month study.

What did the research team do?
The team assigned people to one of two groups by chance. The first group received care through the at-home program. In this program, community health representatives visited Zuni adults with kidney disease in their homes every other week. The community health representatives were people from the Zuni community who worked as part of a clinical care team. At the home visits, they taught participants about exercise, healthy diet, and blood pressure. The community health representatives also did lab tests to check for kidney disease risk factors. For the first six months of the program, participants received text messages with reminders about healthy living. Every three months, participants went to a health class at

What were the results?
Compared with those who received care at the IHS clinic, Zuni adults in the at-home program had better

- Knowledge, skills, and confidence to manage kidney disease
- Quality of life related to mental health

Zuni adults in the at-home program reduced some risk factors for kidney disease, such as blood sugar levels and weight, more than adults who only went to the IHS clinic. For other risk factors, such as blood pressure, there were no differences between the two groups.

There was no difference between the two groups in quality of life related to physical health.
the IHS clinic. Zuni tribal leaders and members from a Tribal Advisory Panel helped design this program.

Adults in the second group received their usual care at the IHS clinic. Adults in both groups took a survey at the start of the study and again 12 months later. The survey asked about people's quality of life and their knowledge, skills, and confidence for managing kidney disease.

**What were the limits of the study?**
The study took place in one American Indian reservation in rural New Mexico. The results might be different for people in other places. The team didn't look at which parts of the program might explain the changes they found.

Future research could see if the program works as well with a larger group of people with kidney disease. Researchers could also look more closely at each part of the program.

**How can people use the results?**
Clinics in rural areas could consider offering at-home programs with community health representatives to help patients with kidney disease.

*To learn more about this project, visit www.pcori.org/Shah099.*