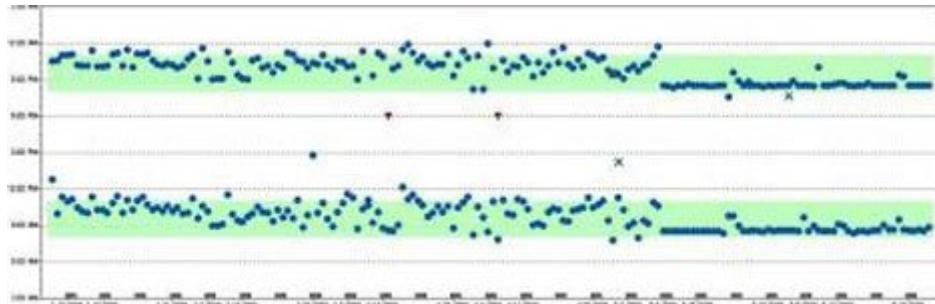


PROFESSION



The graph depicts a patient's medication-taking habits. The scattered dots illustrate irregular adherence before the study intervention, followed by consistent dots that depict improved compliance immediately after beginning the intervention, which involved electronic monitoring and personal counseling.

Technology and counseling help improve drug compliance

■ Many kidney transplant recipients forget to take their immunosuppressive medication, but prescription bottles with integrated microcircuits may help them remember, a study says.

By KEVIN B. O'REILLY ([HTTPS://AMEDNEWS.COM/APPS/PBCS.DLL/PERSONALIA?ID=KOREILLY](https://AMEDNEWS.COM/APPS/PBCS.DLL/PERSONALIA?ID=KOREILLY)) — Posted Dec. 6, 2010

An electronic monitoring system and personalized counseling can help patients improve their medication adherence rates, according to a new study.

Kidney transplant recipients improved their adherence by about 40% using prescription bottles with integrated microcircuits that record each time they take their medication and wirelessly transmit the data to health care professionals, said the study, published online Nov. 16 in the journal *Clinical Transplantation*.

Patients received detailed electronic feedback on how well they were sticking to the immunosuppressive drug regimens that are critical to helping their bodies accept a new kidney.

They also received personalized phone counseling from a nurse on how better to remember to take their medicine.

For example, one patient who frequently forgot to take medications during the morning rush was advised to put them in the car to take them on the drive to work.

Previous research has shown that about a third of kidney transplant recipients failed to take their medications daily as prescribed, and three-quarters had trouble taking them at the right times. An Institute of Medicine report released in 2006 cited research estimating that 40% of patients do not take their drugs as prescribed.

"Medication adherence doesn't really change with education about the disease or the drug," said Cynthia Russell, lead author of the study and an associate professor of nursing at the University of Missouri Sinclair School of Nursing.

"What works is this whole idea of self-monitoring," she said.

"We're probably spending too much time focusing on patient education, and we probably need to focus on these kinds of techniques to help patients actually change their medication adherence."



Russell

EXTERNAL LINKS

"Taking Immunosuppressive Medications Effectively: A pilot randomized controlled trial in adult kidney transplant recipients," *Clinical Transplantation*, published online Nov. 16 ([link](#): <https://www.ncbi.nlm.nih.gov/pubmed/21077956/>)

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