Study finds patients with kidney failure are ready and willing to use mobile health

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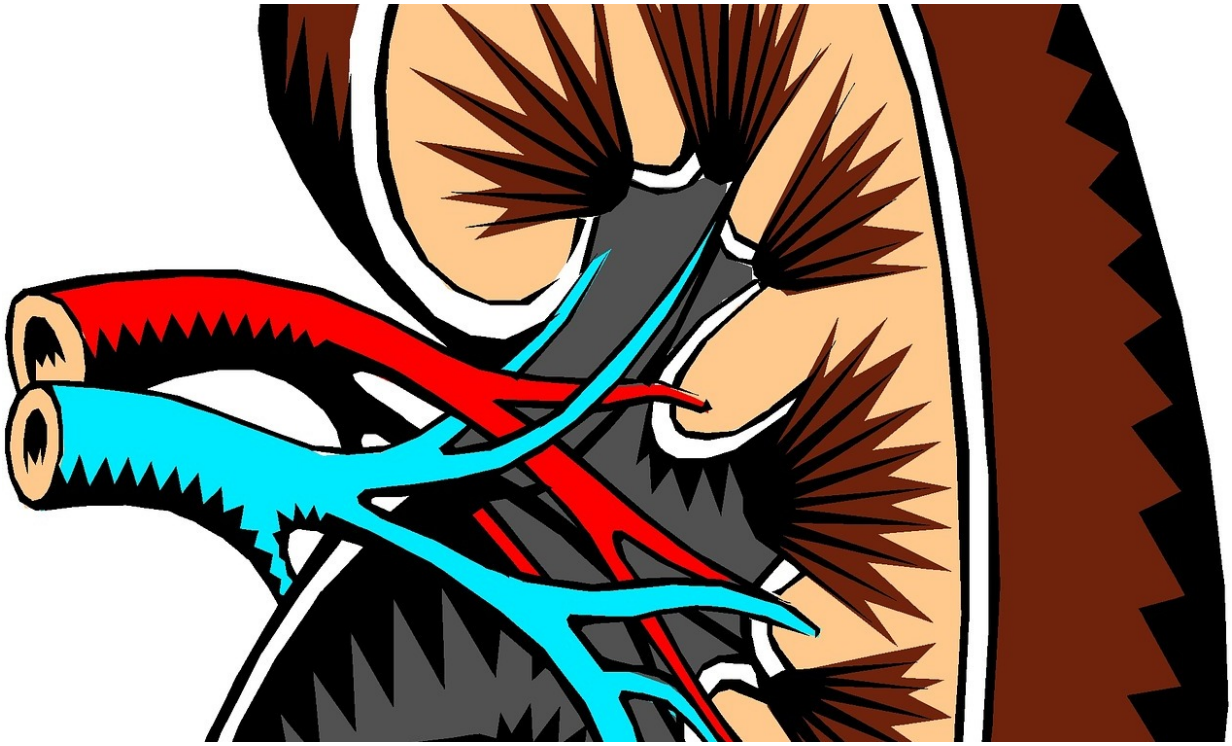

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In a survey of adults with kidney failure who were receiving dialysis treatments, most patients were proficient in mobile health and willing to use it. The findings come from an analysis that will appear in an upcoming issue of *CJASN*.

Mobile devices, such as smartphones and tablets, can be used by individuals to access their medical information, track and receive reminders of their appointments and medications, and participate in virtual visits with clinicians. In this way, mobile health can provide many benefits for patients, especially for those with complicated care and dietary restrictions.

"Importantly mobile technology has been used to improve treatment adherence; address patient-reported symptoms in real time; improve nutrition, activity and mental health; assist in empowering patients to reverse the predominantly one-way care delivery system; and place the patient at the center of their own health care," said Wael Hussein, MD, of Satellite Healthcare.

A limiting factor for healthcare providers and technology developers is whether people on dialysis are ready to use mobile health. Dr. Hussein and his colleagues conducted a survey of adults with kidney disease who were undergoing dialysis to assess the availability of mobile devices and the Internet for such patients, and to get a sense of their proficiency and interest in using mobile health.

A total of 949 patients (632 receiving hemodialysis and 317 receiving home dialysis) across 3 U.S. states completed the survey. Among participants, 81% owned smartphones or other Internet-capable devices, and 72% reported using the Internet. The majority (70%) reported intermediate or advanced mobile health proficiency.

The main reasons for using mobile health were for making appointments (56%), communicating with healthcare personnel (56%), and obtaining laboratory results (55%). The main concern with mobile health was privacy and security (18%).

Mobile health proficiency was lower in older patients, participants with

Hispanic/Latinx ethnicity, and those with less than college education. Employment was associated with higher proficiency.

"Mobile health can be utilized to bring along a number of interventions that can help people on dialysis manage their health and improve independence," said Dr. Hussein. "Findings of our study are encouraging to healthcare providers and technology developers to invest in innovations and solutions that utilize mobile health.

An accompanying editorial notes that applying mobile health to kidney care could benefit from a number of lessons learned from other clinical areas where the use of apps is more widespread.

An accompanying Patient Voice editorial provides the perspective of a patient who has lived with kidney disease for 18 years, noting that "integrating mobile health into the kidney healthcare system will empower patients to embrace taking charge of their health."

More information: Wael F. Hussein et al, The Mobile Health Readiness of People Receiving In-Center Hemodialysis and Home Dialysis, *Clinical Journal of the American Society of Nephrology* (2020). DOI: 10.2215/CJN.11690720

Karandeep Singh. Mobile Health in Dialysis: The Best Engagement Medium Is the One that's with Patients, *Clinical Journal of the American Society of Nephrology* (2020). DOI: 10.2215/CJN.18051120

Lana Schmidt. Patients with Kidney Disease: Ready to Use Smartphones for Health Care Delivery?, *Clinical Journal of the American Society of Nephrology* (2020). DOI: 10.2215/CJN.17771120

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