



# PRESS RELEASE

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## STUDY EXAMINES SYMPTOMS BEFORE AND AFTER KIDNEY TRANSPLANTATION

*Transplantation can help to relieve a variety of symptoms experienced by individuals with kidney failure.*

### Highlights

- In a study of patients waiting for a kidney transplant, those who experienced various symptoms had a higher risk of dying while on the waitlist.
- Symptoms tended to increase or remain unchanged between transplant evaluation and transplantation; however, at 3 months after transplantation, 9 of 11 symptoms lessened.

**Washington, DC (June 18, 2021)** — Investigators have examined how various symptoms experienced by individuals with kidney failure are impacted by kidney transplantation. The findings will appear in an upcoming issue of *CJASN*.

People with kidney failure must often deal with numerous symptoms, such as fatigue, cramping, muscle soreness, numbness, dizziness, and loss of appetite. Although kidney transplantation is the optimal treatment for restoring kidney function in patients with kidney failure, how it affects these symptoms is unclear.

To investigate, Mara A. McAdams-DeMarco, PhD (Johns Hopkins) and her colleagues analyzed information on 1,298 kidney transplant candidates and 521 kidney transplant recipients. “This is the first study to investigate how symptoms change before and after kidney transplantation,” said Dr. McAdams-DeMarco.

Candidates reported being moderately to extremely bothered by fatigue (32%), dry skin (27%), muscle soreness (26%), and itchy skin (25%); 16% reported high and 21% reported very high symptom burden. During a median follow-up of 1.9 years, 12% of patients died on the waitlist, and those with very high symptom burden had a 67% higher risk. By the time patients were to receive transplants, 34% experienced an increased symptom burden while 42% remained unchanged.

Among kidney transplant recipients, patients experienced a lessening of symptoms following transplantation, with an overall 10% improvement in symptoms, followed by little further change from 3 months through 12 months after surgery. There were early (first 3 months) improvements in 9 of 11 symptoms, and itchy skin and fatigue had the greatest improvements.

“Our findings on the post-transplantation change in symptoms can help inform the important discussion surrounding post-transplant care, clarify the timeline for improvement, identify populations who are most likely to benefit, and promote patient-centered care,” said Dr. McAdams-DeMarco.

An accompanying Patient Voice describes the perspective and experience of David Rodriguez, who was diagnosed with kidney failure in 2008 at the age of 36 and then received a kidney transplant through a paired-exchange kidney donation.

Study co-authors include Kathryn Taylor, RN, MPH, Nadia M. Chu, PhD, MPH, Xiaomeng Chen, MSPH, Zhan Shi, MHS, Eileen Rosello, BA, Sneha Kunwar, BA, Paul Butz, BS, Silas Norman, MD, Deidra C. Crew, MD, ScM, Keiko I. Greenberg, MD, MHS, Aarti Mathur, MD, Dorry L. Segev, MD, PhD, and Tariq Shafi, MBBS, MHS.

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The article, titled “Kidney Disease Symptoms Before and After Kidney Transplantation,” will appear online at <http://cjasn.asnjournals.org/> on June 18, 2021, doi: 10.2215/CJN.19031220.

The accompanying Patient Voice will be posted online when available.

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