A National Tragedy’s Legacy of Hope: Research Shows Opioid Crisis is Boosting Transplant Organ Availability

In the past few years, the number of organs available for transplant has increased dramatically. This is great news for transplant patients on long waiting lists, but the reason for these record-setting years is an ongoing national tragedy. In a paper published in the journal Clinical Transplantation, researchers have shown this increase is largely fueled by opioid deaths.

Dr. David Goldberg
“The data suggests the increase in organ availability is not due to large-scale systematic improvements in the procurement system,” said associate professor David Goldberg, M.D., a transplant hepatologist at the University of Miami Miller School of Medicine. “On the national level, it is almost exclusively a byproduct of this ongoing tragedy. These are families and donors who saved lives in a final act of generosity. These transplants are lifesaving and we should honor – never diminish or mislabel – the circumstances of any donor’s gift.”

In the study, Dr. Goldberg and co-author Raymond Lynch, M.D., assistant professor at Emory University School of Medicine, found that between 2009 and 2018, more than 117,000 organs were donated by more than 36,000 donors with a history of drug use.

While previous research examined the link between drug-related deaths and organ availability, the confounding factor has been the donor’s cause of death. Sometimes people are coded as having died from drug intoxication. In other cases, they may have been coded as dying from asphyxiation or a cardiovascular disease even though drug use was a major contributing factor in their death. Dr. Goldberg wanted to see past the coded information to accurately quantify the number of donors impacted by drug use.

“We felt that looking only at the mechanism might undercount the role of the drug epidemic,” said Dr. Goldberg. “When we looked at those donors who died from another mechanism, they looked very similar to those who were coded for drug intoxication. We saw 20-, 30-, 40-year-olds who suffered a
cardiovascular death who also happened to be using drugs.

“Accurate data is necessary for us, as a transplant system, to get better at our jobs. Any time we have bad data, we can’t learn. Misreporting the role of drug use in deceased organ donors isn’t just an issue for our health care system, it’s also misrepresenting the generosity of families who paid the ultimate price — losing a loved one — due to the opioid epidemic. These people decided to save someone else even as they lost a loved one. We don’t get to rewrite that story.”

The study found there were 2,700 more deceased donors nationwide in 2018 than in 2009. Using the same years for comparison, they found the number of drug-related deaths increased by 2,752. By contrast, the number of non-drug-related donations decreased, with a notable decline in the number coded as dying from stroke.

Increases were more pronounced in the Northeast, Southeast and Midwest. The volume at some organ procurement organizations (OPOs) increased by more than 100%. Still, the increases did not entirely mirror regional drug-related death rates, pointing to potential faults in the organ procurement systems.

Drs. Goldberg and Lynch were particularly concerned that undercounting drug deaths could obscure which procurement organizations are working more effectively. For example, the OPO in Nevada saw a 202.3% increase in donors over the same period, with only 41.4% coming from drug-related deaths.

This raises the questions: What is Nevada doing differently and should other OPOs emulate their approach? Drs. Goldberg and Lynch feel these results should inspire a clear-eyed
review by OPOs to determine the most effective ways to increase transplant organ availability.

“As researchers, our goal is to use data to increase the number of lives saved through transplantation. We hope the impact of this research will be just that: to identify which OPOs excel at working with overdose death donors, and also which OPOs have increased other types of donation,” Dr. Goldberg said. “When we know what we do well in organ donation, we can replicate it in other places.

“With this new data, OPOs can share best practices and help other organizations that have not seen the same increase despite being in an area that has seen a similar impact from the opioid epidemic.”