Overturning Roe Will Do Harm to Our Patients

Andrea L. Oliverio and Monica L. Reynolds

We dissent.

On June 24, 2022, the US Supreme Court overturned precedent established by *Roe v Wade* in 1973 and *Planned Parenthood v Casey* in 1992, which eliminated the constitutional right to abortion. In the wake of this decision, individual state laws govern the legality of abortion. Thirteen states have "trigger" laws that ban abortion at a specified time after the overturning of *Roe*, and another 7 states have pre-*Roe* laws banning abortion that remain on the books but have not been enforced since 1973.[1] In discussing a patient's fate, dissenting justices stated that with the Court's opinion, "a state can force her to bring a pregnancy to term even at the steepest personal and familial costs."[2]

Access to abortion is particularly salient for those with chronic kidney disease (CKD), whose health and childbearing experiences are more nuanced than these laws can acknowledge. Owing to an altered hypothalamic-pituitary-ovarian axis, erratic menstrual cycles are common in people with CKD[3,4] and may impair awareness of pregnancy, limiting the ability to find abortive services within 6 weeks' gestation, a timeline currently set in 4 states.[1] Exemptions in instances where abortion will save a pregnant person's life or preserve health are heterogeneously applied across states, and in some states exemptions do not exist. In Missouri, abortion is now banned "except in cases of medical emergency."[5] In Michigan, a law passed in 1931 prohibits abortion unless it "shall have been necessary to preserve the life of such woman."[6] Analysis by the Guttmacher Institute details that exceptions for health have generally permitted abortion in instances of "substantial and irreversible impairment" or "imminent peril" of a "major bodily function." In such cases, it is the physician's responsibility to prove this.[7] In this post-*Roe* era, where and by whom will the line be drawn between health and life for pregnant people with CKD to justify an exception? Is a patient with a severe lupus nephritis flare at 14 weeks' gestation, for whom termination of pregnancy would facilitate more treatment options, in "imminent peril"? Does accelerating the need for dialysis by several years in a patient with CKD stage 4 constitute "substantial and irreversible impairment"? When a pregnant patient on dialysis is advised that optimal pregnancy care would include increasing to 36 hours per week of hemodialysis, straining their ability to work or care for other children at home, is this sufficient disruption of "bodily function?" For our patients, these decisions influence not only their health, but their functionality and livelihoods. Each person with CKD deserves the right to draw their own, highly personal line, weighing the risks and benefits of continuing a pregnancy. To support patients in their reproductive goals, it is imperative that nephrologists become familiar with our state laws, which may evolve, so that we may advise our patients about the safest available treatment options and nearest resources.[1]

Historically, pregnancy was discouraged in people with CKD owing to risks of maternal morbidity, death, and poor fetal outcomes. With advancing neonatal care, more recent evidence suggests that live birth rates have improved for people with CKD and that risks are decreased when pregnancies are well planned with optimized preconception blood pressure and disease stability on a regimen of pregnancy-compatible medications.[8] However, timing a pregnancy in the context of one's kidney disease, whether it may be progressive or relapsing and remitting, as well as the myriad other personal, relational, social, and economic factors that influence family planning, is not always straightforward. Family planning challenges specific to CKD, as well as downstream challenges in pregnancy, now exacerbated by restricted abortion access, are summarized in Fig 1. Options for reliable contraception may be medically limited for some people with CKD, owing to the potential cardiovascular risks of estrogen-containing contraception,[9] cost, or access to procedures for implantation and removal. Contraception use is low in both kidney transplant recipients and those on dialysis[10,11]—2 of the most vulnerable populations to a high-risk, unplanned pregnancy. For those with a kidney transplant, conceiving while taking standard-of-care maintenance immunosuppression with mycophenolate mofetil increases the risk of spontaneous abortion and congenital malformations.[12] Overall, there has been a reported lack of confidence from nephrologists in counseling about family planning and pregnancy owing to a lack of education and experience.[13] Following the reversal of Roe, this patient-centered counseling is more critical than ever.

CKD is currently estimated to complicate 3% of pregnancies.[14] Although risk is inherent in all pregnancies, it is particularly elevated in those with underlying CKD. The United States currently has the highest maternal mortality rate in the industrialized world and each year roughly 700 women die owing to pregnancy or delivery complications.[15] In the United States, complications from preexisting chronic conditions are the fastest-growing cause of maternal mortality, and are responsible for a third of all maternal deaths.[16] At the time of delivery, the odds of severe maternal morbidity and mortality are nearly 6 times higher and the odds of preterm delivery are 4 times higher when CKD is present than when it is absent.[17] Compared to the general population, pregnant people with CKD have a 10-fold higher risk for preeclampsia,[18] which increases the risk of subsequent cardiovascular disease. Those with

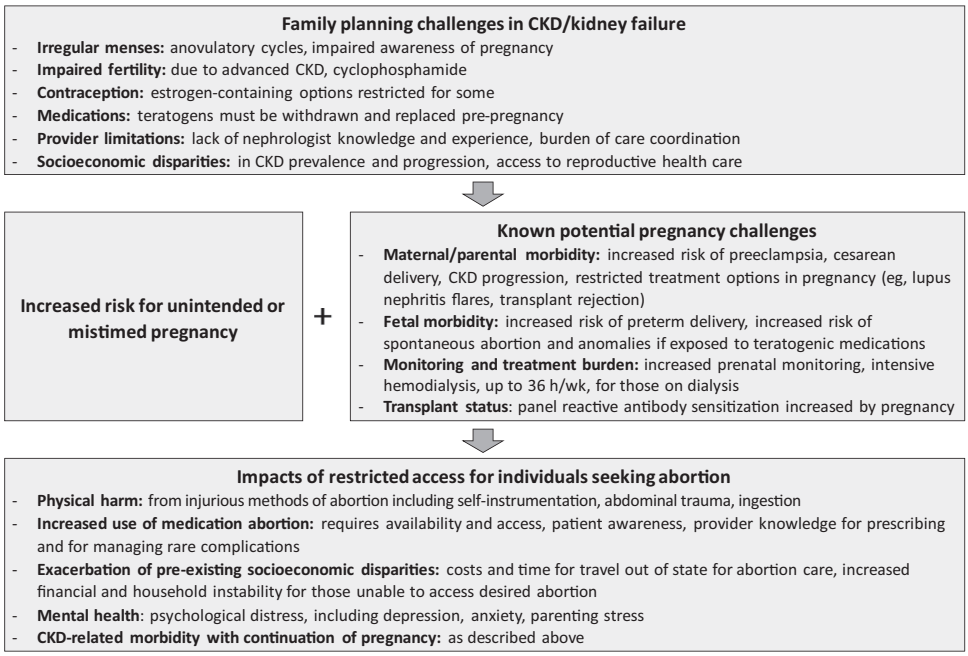

Figure 1. Challenges in family planning, pregnancy, and the impact of restricted abortion access in patients with chronic kidney disease (CKD).

chronic medical conditions are at nearly 50% higher risk of experiencing peripartum mental illness.[19] In addition, pregnancy-associated progression of CKD was reported to occur in 80% of individuals who experienced pregnancy with a preconception estimated glomerular filtration rate of <60 mL/min/1.73 m^2.[20] In this recent cohort of patients with CKD stage 3-5, pregnancy accelerated the onset of kidney failure by an average of 2.5 years.[20] Although CKD progression may not immediately threaten one's life in pregnancy, it certainly affects health and can decrease longevity across a lifespan. These risks will be compounded in marginalized communities that are disproportionately impacted by the lack of access to abortion services owing to systemic inequities.[21,22] Black women in the United States are 50% more likely to have a preterm birth than White women,[23] and the maternal mortality is 3.5 times higher in non-Hispanic Black women than non-Hispanic White women.[24] Black people with CKD are also more than 3 times as likely as White people to initiate maintenance dialysis.[25] The fall of *Roe* will have the greatest impact on our most disadvantaged patients.

Abortion is both common and safe. In the United States, it has been reported that 1 in 4 women will undergo elective abortion by age 45 years.[26] A small survey of women with glomerular disease found similar results, with 25% reporting at least 1 elective termination.[27] Neither medical nor surgical abortions are medically contraindicated in kidney disease. Access to legal, medically supervised abortion procedures reduces the immediate morbidity and mortality of unsafe abortion procedures.[28,29] Removal of this choice will also negatively impact the physical, mental, and economic health of people with CKD.[30] In a cohort study, those who were turned away from wanted abortions were more likely to report a persistent worsening in self-rated health 5 years later compared to those who received first- or second-trimester abortions.[31] Nearly 10% of those turned away developed a new diagnosis of gestational hypertension within that pregnancy or a subsequent pregnancy within 5 years,[31] an outcome closely linked to long-term cardiovascular health. As procedural abortion access is further restricted, more pregnant people will likely turn to self-managed abortions. As nephrologists, we must equip ourselves with resources so that when a pregnant patient desires an abortion, we can guide them away from life-threatening techniques and connect them to medical management with mifepristone and misoprostol, where available.

The juxtaposition of the desire for pregnancy and the burden of managing a chronic disease is challenging for people with CKD.[32] The risks of pregnancy are substantial and only the childbearing individual can weigh these risks in the context of their unique physical, socioeconomic, and reproductive needs and goals. We will continue to argue that the choice should always be theirs to make. The decision to terminate or continue a pregnancy is a personal and private health care decision. We should not take lightly the task entrusted to us to confidentially discuss these topics, support our patients' decisions, and mitigate risks as best we can. We will continue to stand up for reproductive autonomy and justice, and support access to

comprehensive abortion services for all patients with kidney disease. As nephrologists, we must unite post-*Roe* to engage in multidisciplinary care that ensures all patients receive comprehensive, personalized, and unbiased family planning services that includes the entire spectrum of reproductive health care.

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