EDITORIAL

Lawmakers v. The Scientific Realities of Human Reproduction

The Editors

The just-announced U.S. Supreme Court decision in *Dobbs v. Jackson Women's Health Organization* represents a stunning reversal of precedent that inserts government into the personal lives and health care of Americans. Yet it was not unexpected. In the long, painful prelude to the decision, many states have severely limited access to reproductive health care. The fig-leaf justification behind these restrictions was that induced abortion was a dangerous procedure that required tighter regulation to protect the health of persons seeking that care. Facts belie this disingenuous rhetoric.[1,2] The latest available U.S. data from the Centers for Disease Control and Prevention and the National Center for Health Statistics are that maternal mortality due to legal induced abortion is 0.41 per 100,000 procedures, as compared with the overall maternal mortality rate of 23.8 per 100,000 live births.[3,4]

Experience around the world has demonstrated that restricting access to legal abortion care does not substantially reduce the number of procedures, but it dramatically reduces the number of *safe* procedures, resulting in increased morbidity and mortality. Millions of persons in states lacking protections for abortion care are also likely to be denied access to medication-induced abortions. It may be difficult for many Americans in 2022 to fully appreciate how complicated, stressful, and expensive, if even attainable, their most private and intimate decisions will become, now that *Roe* has been struck down. A recent *New York Times* article recounted the experiences of women, now in their 60s and 70s, who sought abortions before *Roe*.[5] They described humiliating circumstances, unsafe procedures literally performed in back alleys, and the deep shame and stigma they endured. Common complications of illegal procedures included injury to the reproductive tract requiring surgical repair, induction of infections resulting in infertility, systemic infections, organ failure, and death.[6] We now seem destined to relearn those lessons at the expense of human lives.

Without federal protection, recent state laws curtailing or eliminating the right to abortion care will deny Americans' reproductive autonomy and create an Orwellian dystopia. Examples are the Oklahoma law enacted on May 25, 2022, that declares life to begin at fertilization and the Texas bill that went into effect on September 1, 2021, which empowers third parties to bring civil suits and collect damages against persons who perform, aid, or abet abortions. Defendants in such suits will bear their legal costs, while plaintiffs are indemnified against countersuits for bringing groundless actions. Use of postcoital contraception, either hormonal contraception or placement of an intrauterine device, could be equated with abortion and prosecuted; some jurisdictions (e.g., Mississippi) are already considering such actions. A single act of coitus not timed with respect to the menstrual cycle has a 3% probability of causing conception.[7] After conception, approximately 14 days elapse before chorionic gonadotropin reaches detectable levels in maternal blood. Approximately 30% of recognized pregnancies result in miscarriages. Thus, in some jurisdictions, people could be prosecuted for aborting a pregnancy by using postcoital contraception, despite a 98% probability that their actions did not cause an abortion, but there is no way to prove or disprove that they were pregnant.

New laws in a post-*Roe* America declaring that

life begins at conception may have additional ramifications. In vitro fertilization (IVF) did not exist before *Roe*. Since its development in 1978, use of IVF has grown, and 2% of all U.S. births now result from assisted reproductive technology, most commonly IVF.[8] IVF procedures usually result in numerous oocytes ovulated per cycle, and fertilization frequently creates numerous embryos. Because modern IVF practice favors single-embryo transfers whenever possible, to reduce risks of multiple gestation and attendant complications, unused embryos are generally frozen for potential future transfer. Nationwide, there are tens of thousands of human embryos cryopreserved in IVF laboratories. While "adoption" programs exist to allow persons to donate their unused embryos to others who would like to implant them, many people are uncomfortable with this option, and unused embryos are often destroyed. If these embryos are declared human lives by the stroke of a governor's pen, their destruction may be outlawed. What will be the fate of abandoned embryos, of the people who "abandon" them, and more broadly of IVF centers in these jurisdictions?

For nearly 50 years, Americans have lived under the protection of *Roe v. Wade*, free to determine their own reproductive destinies. At a time when dozens of other countries around the world are codifying protections for reproductive decision making for their citizens, we are turning the clock backward to take these rights away from our citizens. As has been pointed out by others,[9-11] the most privileged members of U.S. society will always be able to work around restrictive laws and find abortion care in jurisdictions that permit it. Currently proposed changes in our laws will be most burdensome and unfair to the low-income persons and persons of color who are least able to overcome the impediments placed in their paths. These changes will inevitably exacerbate our already vast disparities in wealth and health.

By abolishing longstanding legal protections, the U.S. Supreme Court's reversal of *Roe v. Wade* serves American families poorly, putting their health, safety, finances, and futures at risk. In view of these predictable consequences, the editors of the *New England Journal of Medicine* strongly condemn the U.S. Supreme Court's decision.

Disclosure forms provided by the authors are available with the full text of this editorial at NEJM.org.

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