Introduction

When we undertook *Whose Choice Is It?*, our goal was to publish the most comprehensive book of the several editions of *Abortion, Medicine and the Law* we have done. We felt no less was necessary because of the continuing, and even increasing significance of the issue in the United States and globally. While the Supreme Court's 7–2 decisions in the *Roe* and *Doe* cases in 1973 were thought by most people to have resolved basic questions of reproductive choice, those questions have in fact remained prominent in political, policy, and legal debates in the United States. The intensity of the controversy has even increased in recent years as anti-choice advocates have pressed for more and more restrictive legislation by state legislatures, and Republican leadership both on the national and state levels has made restrictive legislation a core element of its political strategy.

Probably more than at any time since the Supreme Court's 1973 decisions, the continued vitality of *Roe* and *Doe* are in question. If they are overturned by the Supreme Court, legal disputes over abortion will become even more prevalent in the United States. Legislators in all 50 states will have to make a series of choices, and they will not be able to pass extreme laws for political reasons knowing they will be struck down by a federal court. Similarly, the supreme courts of all 50 states would then have the responsibility of reviewing those laws under 50 state constitutions, a responsibility that until now has fallen almost exclusively to the U.S. Supreme Court acting under the U.S. Constitution.

The ongoing abortion debate has by no means been limited to the United States. Some countries have liberalized their laws since the *Roe* decision—by judicial decision, legislation, or constitutional referendum—while others have enacted more restrictive regimes. In countries where religious objections are minimal and access to abortion care is solidly accepted, that is not likely to change. But in most countries, there is at least some debate over what the law should be and how accessible abortion care should be. That debate is not going to stop. In Argentina, intense lobbying by the Catholic church thwarted a liberalization law as recently as 2018, but an effective grassroots movement was able to reverse that decision in 2020, culminating in a dramatic 38 to 29 vote in the Senate. In spite of that victory

for pro-choice advocates, one can be sure the fight over abortion will continue in Argentina.

The only indisputable fact is that the entire subject of abortion—safety, morality, legality, accessibility, human rights and freedoms, reproductive justice, and a host of other issues—is very much a present part of public policy discussions in countries around the world. That is not going to change in the foreseeable future. Because of the significance of abortion access as a subject that touches so many issues worldwide, our overriding purpose was to make this book as comprehensive as possible while maintaining the very highest quality of the work. We believe we achieved that goal and are excited by the breadth, depth, and objectivity of the work, the strength of our contributors, and the richness of each chapter. Whatever may be the future of the *Roe* and *Doe* decisions, *Whose Choice Is It?* will be an invaluable guide in the United States and globally for advocates, legislators, judges, physicians, public health officials, and anyone who wants to know more about issues related to abortion.

American and Canadian Law

Two chapters address in depth the array of legal issues that have evolved in the United States and Canada, both legislative and judicial. We felt it was important to have a particularly thorough chapter on American law not just because we are American lawyers with experience in constitutional law, but because the scope of the issues that have been addressed by American courts is unique. There are 50 separate states and any number of local jurisdictions that can pass legislation that gives rise to litigation under *Roe* and its progeny. As a result, the United States has developed a much more extensive body of law regarding different iterations of abortion restrictions than any other country.

The author of Chapter 2, Abortion Law in the United States, is Professor Edward B. Goldman from the University of Michigan Schools of Law, Public Health and Medicine. Professor Goldman is one of the nation's leading experts and a highly regarded author. He manages the University's program on sexual rights and reproductive justice in the Obstetrics and Gynecology Department and teaches reproductive justice in the law school. His chapter analyzes the entire gamut of issues that have come before the courts, and his discussion of those issues will be an excellent source and guide to anyone in the United States or elsewhere who is interested in questions about regulatory efforts to restrict access to abortion. Throughout the

chapter, Professor Goldman comments on the legal implications should *Roe* be reversed, and his chapter would be especially valuable to legislators, advocates, and others should that happen. His discussion is supplemented by Appendix A, which compiles current abortion laws in every state.

Chapter 3, Abortion Law in Canada by A. Anne McLellan and Odessa M. O'Dell, is an in-depth treatment of Canadian statutory and judicial abortion issues. Ms. McLellan has served as Minister of Justice, Attorney General, and Deputy Prime Minister of Canada, and after her career in government, she was a Distinguished Scholar in Residence at the University of Alberta. No one is in a better position to address the Canadian experience. Among the reasons we felt that a thorough treatment of Canadian law was important is the unusual journey that abortion law has taken in Canada. Central to that history are the *Morgentaler* cases, a series of decisions that involved prosecutions of Dr. Henry Morgentaler, a fierce advocate of a woman's right to choose and a man with a remarkable personal history. He was a Jewish Polish-born Canadian physician who, as a youth during World War II, was imprisoned at the *Łódź* Ghetto and later at Dachau and Auschwitz. Unsurprisingly, given his personal history, Dr. Morgentaler was not cowed by the threat of prosecution by Canadian authorities, and he openly flouted Canadian legal prohibitions against abortion.

In the January 1988 *Morgentaler* case, the Canadian Supreme Court ruled the existing statutory restriction on abortion invalid under the Charter of Rights and Freedoms that had been adopted in 1982. Especially notable in that decision are the words of Justice Bertha Wilson, whose opinion (Appendix N) addressed a woman's abortion decision with exceptional sensitivity:

> [The abortion] decision is one that will have profound psychological, economic and social consequences for the pregnant woman. The circumstances giving rise to it can be complex and varied and there may be, and usually are, powerful considerations militating in opposite directions. It is a decision that deeply reflects the way the woman thinks about herself and her relationship to others and to society at large. It is not just a medical decision; it is a profound social and ethical one as well. Her response to it will be the response of the whole person.

Justice Wilson agreed that the legal right in Canada to security of the person protected both the physical and psychological integrity of a woman, but more fundamentally she found the statute offensive because it told a woman that her capacity to reproduce was not subject to her own control. She eloquently described that paradox:

> [A woman] is truly being treated as a means—a means to an end which she does not desire, but over which she has no control. She is the passive recipient of a decision made by others as to whether her body is to be used to nurture a new life. Can there be anything that comports less with human dignity and self-respect? How can a woman in this position have any sense of security with respect to her person?

The authors also provide a realistic assessment of how these new rights have actually affected women's access to abortion services as a practical matter, which varies significantly from province to province.

While it would be of limited value to include all of the American and Canadian Supreme Court opinions that have addressed abortion issues, we have included in the appendix excerpts from key opinions. From the *Roe* and *Doe* cases, we included essential parts of Justice Blackmun's opinions (Appendices B and C, respectively); the concurrences of Justices Douglas, Burger, and Stewart (Appendices D, E and F, respectively); and the dissents of Justices White and Rehnquist (Appendices G and H, respectively). Justice Blackmun's later opinion in *Casey* is Appendix J, where he decries Chief Justice Rehnquist's views (Appendix K) as callous and superficial:

> Even more shocking than the Chief Justice's cramped notion of individual liberty is his complete omission of any discussion of the effects that compelled childbirth and motherhood have on women's lives. . . . [F]or the Chief Justice, only women's *psychological* health is a concern, and only to the extent that he assumes that every woman who decides to have an abortion does so without serious consideration of the moral implications of her decision. In short, the Chief Justice's view of the State's compelling interest in maternal health has less to do with health than it does with compelling women to be maternal.

Justice Blackmun's final words in *Casey* are prescient as he describes the politicization of the Constitution. "I am 83 years old. I cannot remain on this Court forever, and when I do step down, the confirmation process for my successor well may focus on the issue before us today. That, I regret, may be exactly where the choice between the two worlds will be made." While Justice Blackmun's prediction accurately foresaw subsequent hearings on the confirmation of Supreme Court appointees, he likely could not have imagined just how far the process would sink where an expected vote to overrule *Roe* became the primary qualification for nomination by Republican presidents.

Justice O'Connor's plurality opinion in *Casey* (Appendix I) is included because of its historically significant discussion of the role of stare decisis in landmark constitutional decisions like *Roe* and *Brown v. Board of Education*.

Other excerpted opinions in the appendix are Justice Breyer's opinion in *Whole Woman's Health* (Appendix L) and Chief Justice Roberts' 2020 concurrence in *June Medical Services* (Appendix M).

Two chapters analyze whether *Roe* and *Doe* were properly decided in 1973 when the Supreme Court ruled unconstitutional the Texas and Georgia laws that restricted a woman's access to abortion. Professor John Hart Ely in Chapter 15, The Wages of Crying Wolf: A Comment on *Roe v. Wade*, sets out the case that *Roe* was wrongly decided as a matter of constitutional law. Making the argument that *Roe* was entirely consistent with core principles of the Constitution is Chapter 16, Finding Abortion Rights in the Constitution, by Professor Laurence Tribe. Professors Ely and Tribe have been giants in the field of constitutional law, and no one has improved on their classic essays. Professor Tribe continues to be one of the leading authorities, if not the foremost authority, on constitutional law in the United States today.

Our treatment of American litigation is capped by the inclusion of two amicus curiae briefs filed with the Supreme Court. The amicus brief in Chapter 4 was filed on behalf of women lawyers in the *Whole Woman's Health* case, and each one of the more than 100 amici relates their individual story about how their own abortion changed their lives, often making their professional life as an attorney a possibility that would have been unattainable otherwise. As one put it, "To the world, I am an attorney who had an abortion; to myself, I am an attorney because I had an abortion." Their individual testimonies are personal and powerful, and some observers believe that this was the most effective of the many amicus briefs filed in the case.

The other amicus brief included in the book was filed in the *June* case by Americans United for Life, the leading anti-choice legal advocacy organization in the United States (Appendix O). It contains a comprehensive list of amicus' arguments why *Roe* should be reversed. While the brief to some extent tracks Professor Ely's analysis, it makes the additional contention that events since 1973 have revealed that *Roe* was predicated on incorrect factual assumptions.

It is no secret, as Justice Blackmun pointed out, that constitutional questions have become political ones in the United States, and we felt it important to include in the book a discussion of politics and abortion. We were fortunate that Congressman William Delahunt of Massachusetts agreed to a series of interviews with David Walbert, which became Chapter 5, Politics, Religion, and Abortion in the United States. Congressman Delahunt had an outstanding public career that included serving as district attorney, where he implemented first-in-the-nation programs to assist abused women and aggressively prosecute rape and abuse; service as a member of the state

legislature; and seven terms in Congress where he was a key participant in many of the most important issues the nation faced. Congressman Delahunt is a lifelong Catholic and product of parochial schools who was taught to be anti-abortion, but later became pro-choice when he thought through the issue on his own—should it be a woman's decision whether to continue a pregnancy, or the state's? As he puts it in his interview, "It's her decision, and it is her issue to deal with the morality of it."

Congressman Delahunt was inspired to a public service career by Jack Kennedy's 1960 presidential campaign, and he notes the irony that conservative Protestants in 1960 were concerned that a Catholic president would be too subject to control by church doctrine and the Pope, but lately Justices Kennedy and Roberts—both Catholics—have been criticized by religious conservatives for the opposite reason, for *not* applying Catholic doctrine when interpreting what the Constitution means regarding anti-abortion statutes. Congressman Delahunt describes how the abortion issue has been used by many politicians who really do not care about the issue but understand how to use it to generate votes. During the course of the interviews, Congressman Delahunt mused that what happened in Germany in the 1920s and 30s could happen in the United States. Just days after his talking about the Brownshirts and the Nazis' initial attempt at a putsch, the U.S. Capitol was stormed by a right-wing mob, encouraged by the president himself.

Abortion Law around the World

We wanted the book to expand beyond North America and address the entire world, and we are grateful to Madison Glennie, Lily Milwit, and Julie Zuckerbrod—who combined practical experience with abortion issues and advocacy and their academic knowledge as lawyers—for their excellent work in Chapter 1, The World's Abortion Laws. The authors note that 67 countries permit abortion upon request, with varied gestational limits, while 26 countries prohibit abortion altogether. To provide readers with deeper insight into the variations among these laws, they describe in detail the specific laws in 31 representative countries from 12 different global regions.

The chapter is not only a comprehensive, up-to-date assessment of abortion laws around the world, it includes revealing legal history behind the laws in a number of countries. For example, the former Soviet Union and the Russian Federation are a case study in how abortion policies can be driven by considerations that have nothing to do with the interests of a pregnant woman or a fetus. The Soviet Union was the first country to permit unrestricted abortion access in 1920, but with the possibility of

war with Germany looming, Joseph Stalin banned abortions in 1936 in an effort to increase the country's population. As a consequence, illegal abortions rose significantly, causing an increase in abortion-related morbidity and mortality. After World War II and Stalin's death, a 1955 decree allowed for first-trimester abortions, but the Ministry of Health fought against contraception with fabricated claims about adverse effects. That, together with bans on sex education in schools, made Russia home to one of the highest annual abortion rates in the world.

The Russian example is one of many that readers should find informative regarding the consequences of abortion regulations. Another is El Salvador, where women are prosecuted under anti-abortion laws for both miscarriages and abortions, the former because it is often difficult to distinguish between the two after the fact. More than 140 women are known to have been charged criminally in El Salvador since 1998 under the country's abortion prohibition. In Brazil, abortion is highly restricted by law, which causes 500,000 illegal abortions each year among 18- to 39-year-old women. Those illegal abortions carry a high incidence of health complications and hospitalizations. Like the experience in other countries, Brazil's legal prohibition against abortion does not stop abortions; it just causes unsafe, illegal abortions. For countries where the information is available, the authors address not just the availability of abortion as a matter of law but its practical availability in light of other barriers to access, such as economics and the refusal of providers to perform procedures.

Abortion Practices in the Past, Present, and Future

Three exceptional contributors, Dr. Rebecca Gomperts, Professor John Riddle, and Anna Reed, go beyond the law and provide a rich description of abortion practices from ancient times to the present. Readers will also gain insights from these chapters as to how abortion practices are changing now and are likely to evolve, and how those changes might impact the right to choose in the future. Professor John Riddle is the acknowledged expert on historical contraceptive and abortion practices from ancient times to today. His previous books include *Contraception and Abortion from the Ancient World to the Renaissance* and *Eve's Herbs: A History of Contraception and Abortion in the West*. We are fortunate that Professor Riddle undertook to write Chapter 6, Women's Knowledge of Abortifacients from Antiquity to the Present. It provides not only an excellent overview of abortion and contraceptive practices historically, but also includes recent historical evidence about those past practices.

While it is not widely known today, herbs were commonly used as abortifacients and contraceptives for millennia. The knowledge of the appropriate herbal regimen was passed down from one woman to another, among midwives, healers, and "wise women." Although the efficacy of herbal treatments would not have been as great as today's pharmaceuticals, they were effective and an important part of women's lives. Knowledge of contraceptives and abortifacients was suppressed at times through the persecution of midwives and "wise women" accused of witchcraft. In the United States, abortion-inducing medications and contraceptives were readily available until the middle of the 19th century. The hostility to abortions in the United States coincided with efforts by all-male medical societies advocating legislation that made it illegal for midwives, or any non-doctor, to provide such services. In short, they eliminated their competition.

Ms. Reed links the past to the present in Chapter 7, A Future from the Past: Self-Managed Abortion with Ancient Care and Modern Medicines. She explains that the historical practice of women self-aborting with herbal medicines has effectively reemerged and expanded with the advent of the medications mifepristone and misoprostol.

> Self-managed abortion (SMA) . . . encompasses a wide array of experiences, including ingesting herbs, massage, drinking tisanes, using a combination of abortion medications (mifepristone and misoprostol), using misoprostol alone, inserting objects into the vagina, using a combination of these methods, or other methods. Although there is increasing awareness about SMA, the practice is not a new phenomenon. The historical record of people self-managing extends throughout history and across cultures.

In addition to her training as a lawyer, Ms. Reed, who grew up in France, brings deep personal experience to her writing. She has been a sex education teacher and youth advocate, overseen the development of reproductive justice curricula for Georgetown University's Street Law program that is taught in high schools, and advised pregnant individuals trying to navigate the complexities of legal and health care procedures that act as de facto barriers. She is also an executive producer of *Self Managed*, a podcast dedicated to destigmatizing and demystifying the practice of self-managed abortion.

Drawing on her experience, Ms. Reed explains the widely differing access to abortion services based on people's socioeconomic, racial, gender,[1]

1. Our book generally uses male/female gender descriptions, not to be dismissive of the serious considerations regarding gender-affirming care, but because reported data, judicial opinions, and most other legal discussions we refer to use traditional binary pronouns.

and immigration status, among other factors. Her chapter addresses how the Trump administration stubbornly refused to make accommodations to the FDA's in-person mifepristone and misoprostol dispensing requirement during the COVID-19 pandemic, leading to litigation to the U.S. Supreme Court. Ms. Reed concludes that self-managed medication abortion will not likely replace clinical abortions entirely because of the need for late-term abortions, and some people will prefer to end their pregnancies in a clinical setting regardless. But if barriers to abortion clinics proliferate in the United States and in some other countries, she envisions self-managed abortion as a safe and promising alternative that will enable many people to bypass clinics entirely.

Once in a great while, someone does things that other people cannot even imagine. One such person is Dutch physician Rebecca Gomperts, a visionary to whom what are insurmountable barriers to others are mere hindrances to overcome. Dr. Gomperts is one of the world's foremost advocates of a woman's right of access to abortion care. David Walbert's interview with her in Amsterdam is Chapter 8. Dr. Gomperts' personal narrative of how she became interested in providing abortion services to people and what she has done in that regard is a fascinating story of how one person can change history while helping many thousands of people. It is a story that will inspire readers, even some who may oppose a woman's right to choose.

In order to care for people who live where abortion access is restricted, Dr. Gomperts outfitted a ship to travel under the Dutch flag, naming the initiative Women on Waves. She has stationed the vessel just far enough offshore to remain in international waters subject to Dutch law where abortion is legal. Women shuttle from shore to the boat to have an abortion, and the enthusiasm of women in country after country has been overwhelming. When she took the ship to Ireland where abortion was prohibited, Dr. Gomperts was told women there would not be interested, but in fact there was a huge outpouring of general support and of women specifically seeking abortions. That visit had an especially lasting impact because it triggered a public discussion of abortion that ultimately led to constitutional referenda that established a women's right to choose in Ireland.

Dr. Gomperts next initiated Women on Web, a telemedicine support service for women around the world needing abortion care. It provides medical abortions without direct in-person contact with a doctor for women where abortion clinics are nonexistent or highly restricted. In the ten years prior to her interview, over 200,000 women from more than 140 countries had had an online consultation with Women on Web, and approximately 50,000 women had received a medical abortion at home.

Dr. Gomperts' many stories about the opposition she has faced from governments and church authorities are both entertaining and deeply troubling. The Maltese government, for example, tried to brand her a persona non grata, an "outlaw" legal status that supposedly disappeared in the Middle Ages. She has been indicted in Poland and so far avoided the infamous Interpol Red Notice for arrest and extradition, but the threat is an ever-present concern. Still, Dr. Gomperts is optimistic about the future and believes that women will have access through medication to self-managed abortions, notwithstanding baseless "scare mongering that it would be dangerous." She is concerned about countries that may ban medical abortions, as Morocco had done just prior to her interview. "What will happen then is that you will have the black market, which is happening all over Latin America. And the problem with the black market is what is sold could be anything. And it's very expensive."

Whatever the future may bring, there is no doubt that Dr. Gomperts will be a major force in determining that future given her vision and personal fortitude.

The Conscience of Medical Providers

Even legislation that permits abortions often excuses medical providers from performing procedures or prescribing abortion pills if they personally oppose abortion. These "conscience clause" exceptions make abortion care unavailable as a practical matter in many places, partly because providers oppose abortion, but also just because they fear community criticism if they provide abortion care to their patients. The problem is exacerbated by conservative legislators in many countries who justify conscience clause laws by invoking the virtues of conscience, when their real objective is simply to reduce women's reproductive choices.

Professors Bernard Dickens and Rebecca Cook—two of the foremost experts in the world on reproductive and sexual health law—address these issues in Chapter 13, Conscientious Commitment to Women's Health, where they make the case that a conscientious *commitment*, the converse of conscientious objection, should be at the forefront of medical care decisions and should lead health care providers to overcome any personal reluctance to providing reproductive services to women. Conscientious commitment to providing the means of birth control has a long history that could be a precedent, but when it comes to abortion services, conscientious commitment has been largely pushed aside. The authors also discuss the analogous historical experience of social reformers who suffered religious

condemnation and even imprisonment as a parallel to the opprobrium (and even assassination) directed at health care practitioners who provide abortion services today.

Abortions as a Means of Sex Selection

Cornell Professor Sital Kalantry is an expert on international human rights and is faculty director of the Cornell India Law Center. In Chapter 11, Harmful Anti-Sex-Selective Abortion Laws Are Sweeping U.S. State Legislatures: Why Do Some Pro-choice People Support Them?, she provides new insights into sex-selective abortion and its legal proscription, as well as the actual incidence of sex-selective abortions. Professor Kalantry shows how sex-selective abortions do not occur with the frequency or for the reasons that public perception assumes to be the case. She shows that that public and media misperception is rooted in stereotypes of Asian and Asian-American family views. Similarly, while even pro-choice advocates in the United States sometimes support anti-sex selection prohibitions, they do so on the erroneous assumption that sex-selective abortions are rooted in antifemale sex-selection prejudice. Professor Kalantry presents compelling evidence that that is not the case and, again, that those assumptions originate from misplaced stereotypes.

Late Abortions

Chapter 20 by Dr. Warren Hern, Late Abortion: Clinical and Ethical Issues, addresses one of the most emotionally and politically charged subjects among the complex of abortion issues. Dr. Hern specializes in very complicated medical decisions for women of reproductive age, decisions that include questions about the life and health of the woman. His work involves diagnosis of fetal development and genetic disorders, which became even more important with the Zika virus.[2] Dr. Hern learned personally of the critical need for safe abortion services as a Peace Corps physician in Brazil where he witnessed women dying from unsafe illegal abortions. He is hailed as a hero by many, including his patients, but denounced by others because he performs late abortions. While Dr. Hern has received numerous awards and recognitions, including the Carl S. Schulz Award from the American Public Health Association for his scientific contributions and

2. Appendix Q contains excerpts from CDC guidelines for congenital Zika viral infection and testing of pregnant women who may have been exposed to Zika.

his defense of reproductive freedom, he and other providers face constant dangers—including the threat of assassination—because they care for late-term pregnant people. Dr. Hern's life has been threatened many times, anti-abortion terrorists have shot into his clinic, and he has been on their published "hit list."

His chapter describes some of the common situations in which the need for late abortion arises, and it is impossible not to sympathize with Dr. Hern and his patients—whatever one's initial thoughts may be regarding late abortions—after taking the time to understand the actual circumstances these women face and the compelling reasons why doctors provide them with abortion care. All too often, those very real, very human, and very moral considerations are lost in the white-hot political clamor that substitutes for thoughtful discussion of the issues raised by late abortions.

Reproductive Justice

Georgetown Law Professor Jill Morrison is a passionate advocate and the author of Chapter 9, What Lawyers Need to Know about the Reproductive Justice Framework, which is a philosophy and social movement that goes well beyond the right of access to abortion. Reproductive justice encompasses the right to have a child as well as not have a child, and to be able to raise a child in an appropriate environment with access to social, health, and educational resources. Professor Morrison's views were forged when she was a young woman and watched the Religious Right become a hostile political force, Ronald Reagan fan the racist "Welfare Queen" mythology, and American prisons filled as the country waged a war not on drugs, but on drug users. As a Black woman, she is acutely aware that the generations before her could not have imagined the degree of autonomy with which she lives her life, and she is devoted to reproductive justice in the hope that everyone can one day be fully free. Her passion, commitment, and insights will give many readers a new perspective on these issues.

Thoughts from Dr. Alan Guttmacher

Dr. Guttmacher was kind enough to contribute a chapter to our first edition that described how he become an outspoken advocate for a woman's right to choose. Dr. Guttmacher's personal involvement as a leader would warrant inclusion in this volume of his original essay—*The Genesis of Liberalized Abortion in New York: A Personal Insight*—simply for its historical importance and for the personal insights of the man whose name is more associated

than any other in the world with reproductive health. But with the political efforts in the United States in particular that seek to return the country to a time long ago when Dr. Guttmacher was first practicing medicine, his retrospective is especially relevant today. We have included it in this volume as Chapter 17 and are confident that readers of all views will benefit from his reflections. Lawyers will find particularly fascinating the discussion he relates between the renowned Judge Learned Hand and Professor Herbert Wechsler when the American Law Institute was preparing a model abortion law a decade before the *Roe* decision. Judge Hand unequivocally condemned the ALI "reform" law of 1962 as "a rotten law" because it was "too damned conservative." Dr. Guttmacher later realized that Judge Hand was absolutely correct.

Medical Research and Fetal Tissue

Chapter 18 by Dr. Kenneth Ryan, The Medical and Research Uses of Human Fetal Tissues, appeared in part in an earlier edition. Dr. Ryan at the time was the leading authority on the ethics of fetal tissue research and the co-chair of the panel that opposed the ban on federal financing of research using fetal tissue. In addition to being the longtime chair of OB/GYN and Reproductive Biology at Brigham and Women's Hospital at Harvard, Dr. Ryan made significant discoveries in biochemistry that included understanding how the body produces estrogen, which led to treatments for infertility and certain cancers. His chapter addressed the unique importance of human fetal tissue for medical research and explained that much of that tissue is available only as a result of induced abortions. Dr. Ryan is deceased, but the ethical, medical, and practical considerations that he addressed in his original chapter have changed little. Because of that and because of Dr. Ryan's exceptional status and expertise, we decided to republish his original chapter with an updating addendum that addresses subsequent advances in medical knowledge and technology.

When Life Begins

The debate over when "life" begins ties into the question of what constitutes a "person" under the United States Constitution. Anti-choice advocates have claimed that "human life" begins at conception, which is a religious view, not one based on biological fact. More recently, they point to a detectable "heartbeat" as the beginning of life, but again that is an argument adopted for political appeal that disregards the facts. As Dr. Charles Gardner wrote

in an earlier edition of this work: "The embryo is not a child. It is not a baby. It is not yet a human being."[3] Even a solitary sperm cell and an unfertilized ovum are alive. Embryos early in gestation are equally alive, but they are no more "human persons" than either a lone sperm cell or an unfertilized ovum. As Carl Sagan wrote in addressing this question, no Western society treats all life as inviolable.[4] For Sagan the question was: When does a human embryo or fetus become so different from those of other animals as to be distinctly human? He examined the process of embryonic and fetal development and looked for the "earliest onset of human thinking" as the first point at which a human fetus should be considered meaningfully different than fetuses of other animals. He determined that does not begin even intermittently until the middle of the seventh month at the very earliest.

In Chapter 12, How Sentience Should Mediate the Right to Abortion, Cornell Professor Sherry Colb tackles the "person question" and shows that abortion of a pre-sentient fetus should not raise a moral or legal obstacle.

> Before sentience, the fetus is "something" rather than "someone." If a sperm cell disappears, we might consider that a loss to the person whose sperm cell it was, but we would not say that the sperm cell itself has lost anything. They are just cells, with no sensations or emotions that would make life "better" or "worse" for them in different circumstances. Likewise, with the non-sentient fetus. Although such a fetus looks much more like a human being than a sperm cell does, it still has no interests in avoiding pain, in feeling pleasure or warmth or in having any particular thing happen to it. [A non-sentient fetus] is a potential human being, just as the sperm cell or egg cell or zygote is. And if it never becomes a human being because pregnancy is terminated prior to sentience, it will not have lost anything that it once had—a life in which there is the experience of pleasure and pain.

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3. C. Gardner, *Is an Embryo a Person?*, *in* ABORTION, MEDICINE AND THE LAW 437, 445 (J.D. Butler & D. Walbert eds., 1992). Similarly, the common belief that the genetic constituents of a fertilized egg comprehensively prescribe the biology of a full-term fetus is incorrect. Environmental and stochastic factors are very important in fetal development, and the gap between genetic determination and those factors is especially significant for the fetal brain. "[T]here is not enough genetic information in the approximately 20,000 genes, of which approximately half are expressed in the brain, to code for the location and connections of each of the billions of neurons and trillions of synaptic connections." T. White, *Brain Development and Stochastic Processes During Prenatal and Early Life*, 58 J. AM. ACAD. CHILD & ADOL. PSYCH. 1042, 1046 (2019).

4. C. Sagan & A. Druyan, *Is It Possible to Be Pro-Life and Pro-Choice?*, PARADE MAGAZINE, Apr. 22, 1990.

Given those facts, Professor Colb concludes that neither the reason for an abortion nor the method of an abortion should be relevant to whether an abortion should be permitted pre-sentience since an abortion can cause no harm to a being in any meaningful or moral sense at that point in a pregnancy. Only after fetal sentience is attained is there a real moral question. Professor Colb believes that that question should be resolved by the pregnant woman herself because it is her body that would be used against her will if her choice is overridden. She also explores possible scenarios that could arise if medicine were to develop an artificial womb that would permit a viable, sentient fetus to develop to maturity outside the woman if her pregnancy were terminated. Finally, Professor Colb discusses the significance of sentience in how we treat animals and cause them pain.

One cannot overstate the importance of Dr. Colb's analysis given the efforts of anti-choice legislators to ascribe personhood status to an embryo or early-stage fetus. As Dr. Charles Gardner wrote in our earlier volume, "There will always be arguments based on spiritual or ethical beliefs to convince an individual of the rightness or wrongness of abortion, but each person should first understand the biology to which those beliefs refer." Sentience may occur developmentally before human "thinking," but it still requires much more than a mass of living, functioning cells, whether those cells are acting as an early heartbeat or performing other pre-sentient activities. The fetal capacity to experience pain does not exist until well after reflexive muscle contractions occur in response to stimuli. "[P]ain perception requires cortical recognition of the stimulus as unpleasant," and the cortical connections that are necessary for that perception—in other words, for the earliest beginning of sentience—do not begin to occur until the third trimester.[5]

Anti-abortion advocates sometimes point to earlier reflexive muscle contractions in response to stimuli as fetal pain, but they are not. Perception of pain at that point is impossible because the predicate cortical connections do not exist. The spread of such misinformation about fetal pain and fetal

5. S. Lee et al., *Fetal Pain: A Systematic Multidisciplinary Review of the Evidence*, 294 J.A.M.A. 947, 949 (2005); H. Harcourt, J. Bering & J. Gullam, *Opposition to Abortion Related to Inaccurate Beliefs About Fetal Pain Perception in Utero,* Aust. N.Z. J. Obstet. & Gynaecol. 1 (2021), https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/ajo.13356 (published online ahead of print). As noted in previous editions, it is not until late in the gestational process that "individual neurons [attain] an interconnected collective" that is a prerequisite to sentience. M. Flower, *Coming into Being: The Prenatal Development of Humans, in* Abortion, Medicine and the Law 437, 445 (J.D. Butler & D. Walbert eds., 1992). *See also* E. Borsani et al., *Correlation Between Human Nervous System Development and Acquisition of Fetal Skills*, 41 Brain & Devel. 225 (2019).

development generally has impacted public views of abortion and, in some cases, legislative action, not to mention the adverse impact on women in need of abortion care who have been misled. According to a recent study, the false belief that "the capacity for fetal pain exists in the first and second trimesters is remarkably common. [A]nti-choice participants [in the study] had an especially accelerated view of fetal ontogeny, with 40% believing that the capacity to perceive pain exists in the first trimester."[6]

The Epidemiology of Abortion in the United States and Elsewhere

A great deal of data has been collected around the world regarding the incidence of abortion, the relation between the prevalence of abortion and a country's laws, variations among socioeconomic and ethnic groups, the relation between the incidence of abortion and unintended pregnancies, and other issues. Because of the importance of the frequency of abortion and the complex of factors that affect abortion, we have included as Appendix P, Abortion Surveillance—United States 2018, which is a November 2020 Morbidity and Mortality Report of the CDC. The report is very informative not only as to the number and rate of abortions but the variability based on a person's age, marital status, race, state of residence, gestational age, number of prior live births, and the type of abortion. Trends over time are also analyzed. After nationwide legalization of abortion in 1973, the total number of *reported* abortions increased rapidly into the 1980s before trending down, although there are large variations in the rate of abortions across various subpopulations. In 2018, a total of 620,000 abortions were reported to the CDC, which is a slight increase from the previous year but a substantial decrease from ten years earlier. A somewhat more stable number is the abortion *ratio*, that is, the number of abortions per 1,000 live births. That ratio has also decreased over the prior decade, except for adolescents less than 15 years old, but less so proportionately than did the total number of abortions or the abortion *rate* (which the CDC defines as the number of abortions per 1,000 women within a given population). Currently, approximately three-quarters of all abortions in the United States occur at nine or fewer weeks gestation, and almost 40 percent of all abortions are now medical abortions.

6. Harcourt, Bering & Gullam, *supra* note 5, at 3.

While more detailed in many regards than data from other countries, the CDC report does not address some important factors like socioeconomic status, nor does it evaluate the impact of governmental efforts to restrict access to abortion. Fortunately, there is a substantial amount of other data that shed light on those factors.[7] According to worldwide data over the 30 years from 1990 to 2019, the global rate of unintended pregnancy and the global abortion rate declined initially, followed by a subsequent increase in the rate, returning to the levels of the early 1990s. Unsurprisingly, there are substantial differences between low- and high-income countries in the unintended pregnancy rate. For countries with restricted access to abortion, rates of unintended pregnancies were higher than in countries where abortion was generally legal.[8] To at least some extent, the higher incidence of unintended pregnancies in restrictive countries likely relates to there being less access to sexual and reproductive education and health care, including contraception.

A significant finding of the worldwide data is that the abortion rate is not just higher, but is substantially higher in those countries where abortion access is restricted than in countries where abortion is generally permitted. The annual abortion rate for countries where abortion was restricted was 36 per 1,000 women aged 15 to 49, whereas the abortion rate in countries where abortion was broadly legal was about one-third less, 26 per 1,000 women aged 15 to 49.[9] About half of unintended pregnancies ended in abortion across the data, whether abortion was restricted or broadly legal.[10] Moreover, in the 30 years from 1990 to 2019, the abortion rate declined by 43 percent where abortion was legal, whereas the abortion rate *increased*

7. A recent publication is Jonathan Bearak et al., *Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion: Estimates from a Comprehensive Model for 1990–2019*, 8 The Lancet Global Health e1152 (2020), https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30315-6/fulltext. Other articles that present substantial relevant data include Gilda Sedgh et al., *Abortion Incidence between 1990 and 2014: Global, Regional, and Subregional Levels and Trends*, 388 The Lancet 258 (2016), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)30380-4/fulltext; Susheela Singh & Isaac Maddow-Zimet, *Facility-based Treatment for Medical Complications Resulting from Unsafe Pregnancy Termination in the Developing World, 2012: A Review of Evidence from 26 Countries*, 123 BJOG: An Int. J. of Obst. & Gyn. 1489 (2016), https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.13552.

8. Bearak et al., *supra* note 7.

9. Bearak et al., *supra* note 7, at e1158. Data for China and India are excluded from that calculation because the practices in those countries are atypical and the populations are so large that the data from those two countries would swamp the experiences and data from the rest of the world.

10. *Id.*

by 12 percent where access to abortion was highly restricted.[11] These findings are consistent with previous studies and data from countries around the world that women continue to access abortions, regardless of legal restrictions, even though doing so subjects them to legal and physical risk.[12] While not all the result of restrictive abortion laws, an estimated 6.9 million women were reported to have been treated in 2012 for complications relating to pregnancy terminations that occurred in unsafe circumstances.[13]

Other chapters that complete the book are: (1) Professor Cook's Chapter 10, Modern Day Inquisitions, that addresses the widespread denial of reproductive healthcare and persistent gender discrimination in Central and South America, including abortion prosecutions, and draws historical parallels to past church abuses from the Inquisition to the present day; (2) Professor Paula Abrams's Chapter 14, The Bad Mother: Stigma, Abortion, and Surrogacy, which asserts that damaging stigmas attached to abortion and surrogacy derive from gender stereotyping that influences legislative and litigation outcomes and causes people to underestimate the harm caused by abortion restrictions; and (3) Megan Donovan's Chapter 19, D&E Abortion Bans: The Implications of Banning the Most Common Second-Trimester Procedure, which discusses how state bans on dilation and evacuation (D&E) procedures fall most heavily on women who are already at a socioeconomic disadvantage in obtaining abortion care.

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11. *Id.* at e1159.

12. *Id.* at e1159 nn.28–31. *See also* Guttmacher Institute, *Abortion Occurs Worldwide Where It Is Broadly Legal and Where It Is Restricted*, July 28, 2020, https://www.guttmacher.org/infographic/2020/abortion-occurs-worldwide-where-it-broadly-legal-and-where-it-restricted.

13. Singh & Maddow-Zimet, *supra* note 7. A significant number of these incidents in the developing world result from inadequate care at the time of an abortion procedure. In recent years, however, that is changing because the provision of pregnancy termination services in the developing world have changed considerably with the increased availability of misoprostol. Even with the high morbidity rates, the mortality rate has declined. World Health Organization, Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008 (6th ed. 2011), https://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241501118/en/.