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1 Introduction

Abortions are as old as medicine itself, and it seems that there have always been controversies associated with the practice [1]. The original Hippocratic Oath, for example, explicitly forbids the physician to provide a patient an "abortive pessary" [2]. It is not clear whether this prohibition was mostly based on regard for the fetus or concern about the pregnant woman's health. Or maybe the concern was for the father, whose rights over the child would supersede those of the mother. In any case, this kind of abortion was not a medical service that a good Hippocratic physician would provide.

The prohibition against abortive pessaries has been removed from the version of the Hippocratic Oath often sworn by new physicians in the modern world [3], but (in the United States) the controversy surrounding the practice of abortion has only increased. As this chapter is being written (2019) a fierce Constitutional struggle is brewing as several state legislatures pass increasingly restrictive laws that, if upheld, would limit access to abortion services for millions of women. Proponents of abortion rights are organizing to resist these moves, and the fight promises to be long and acrimonious.

Both sides of this conflict base their advocacy on what they see as conclusive moral arguments. One side ("pro-life") talks about the fetus's right to life, while the other ("pro-choice") stresses the woman's right to self-determination. The public discussion of the issue tends to be carried out in sound-bites, in rancorous confrontations on cable television and in flame-wars on line. The rhetoric is sometimes quite powerful (and politically effective), but logically speaking the arguments themselves are often question-begging at best (and abusively *ad hominem* at worst). Away from the headlines and political clamor, though, there has been some careful

thought and productive analysis in the last 50 years. Applied ethicists on both sides of the issue have clarified the assumptions and principles underlying their own (and their opponents') positions. While there is perhaps no more agreement about conclusions than before, there is greater insight regarding the structure of the respective arguments.

Of course, pediatric cardiac medicine is not about abortion, and the issue only arises in indirect ways. Still, an ethically sensitive and conscientious physician in this field will want to understand the points that divide the two sides, as well as the current state of the law. There are cases, not uncommon, in which severe fetal abnormalities, prenatally diagnosed, portend a truncated life of pain and of marginal quality involving extensive and repeated surgical interventions. Such scenarios raise the question of whether aborting the fetus might be the best course of action for all concerned. In such cases, the perceived morality and legal status of abortion itself might well be a factor in the physician's and (importantly) the family's deliberations. This is especially the case when the diagnosis occurs later in the pregnancy. Additional ethical issues are raised by the fact that certain (especially church-related) hospitals do not allow abortions to be performed in such circumstances. Finally, the profound religious qualms and moral repugnance that some medical professionals feel toward abortion (whether rationally justified or not) can raise thorny issues with important ethical dimensions of their own.

This chapter will begin by surveying the recent discussion of abortion among applied ethicists, highlighting the conceptual inflection points on which the arguments turn. Secondly, we will survey legal developments in the US from *Roe vs. Wade* (1973) to the present and hazard a hesitant guess about where these developments might lead in the near future. Finally, we will consider several ways in which the complexities of the issue might play a role in the patient's deliberations and the physician's participation in the decision-making.

2 The Ethics of Abortion: 50 Years of Debate

2.1 The Traditional Argument

In the mid-twentieth century questions were openly raised regarding the prohibition against almost all abortions that was then ubiquitous in the United States. Supporters of the restrictive laws generally responded by defending the prohibition—arguing that abortion is a straightforwardly immoral instance of homicide. The basic lines of the traditional argument can be ordered and summarized as follows:

- 1. It is always wrong to take the life of an innocent person;
- 2. The fetus is an innocent person;
- 3. Abortion takes the life of the fetus;
- 4. Therefore (from 2 and 3) abortion takes the life of an innocent person;
- 5. Therefore (from 1 and 4) abortion is always wrong.

This argument is clear and logically tight. If its premises (1, 2 and 3) are true, then they will indeed establish the truth of the conclusion (5). There is no disagreement on premise 3: abortion certainly does take the life of the fetus. So, if the conclusion is to be resisted, one must raise questions about premises 1 and/or 2. The controversies surrounding these two premises in the last half of the twentieth century were lively and productive, and they continue even now. We will begin with the discussion of premise #2.

2.2 The Moral Status of the Fetus

We all agree that certain individuals—your uncle, my sister, our fellow citizens—have rights and dignity, and deserve to be treated with respect. We have moral duties to these individuals that we may not in good conscience ignore. There are other creatures—my cat, for example—which it would no doubt be wrong to torture cruelly, but which do not have the same full complement of rights that we accord to you and me. Finally, there are things—rocks, ice cubes, basketballs—toward which we have no moral obligations at all—of any kind. In the terminology of moral philosophy, the first group is said to have full moral status. The last group has no moral standing at all, and the second group has a kind of partial or attenuated status.

In claiming that the fetus is a person, the proponent of the traditional argument (above) is asserting that the fetus has full moral status—the same moral status as you and I. If this claim can be established, it provides powerful support for the antiabortion position, for entities with full moral status presumably have rights—including a right to life—that cannot morally be violated. Defenders of the permissibility of abortion thus often dispute the claim that the fetus has full moral status.

This battle over the moral status of the fetus has two fronts—a terminological/rhetorical front and a more substantive front. In the rhetorical contest the two sides are contending for control of the vocabulary in terms of which the public discussion will proceed. The "pro-life" camp refers to the fetus as a "baby" or "unborn baby" or "unborn child" and the woman bearing it as the "mother." Since presumably we all consider babies and children to have full moral status, if we can be terminologically seduced into categorizing the fetus as a baby or a child, we will be well on the way to according it full moral status as well. On the other side, advocates of the pro-choice position prefer the technical (and hence somewhat impersonal) term "fetus" (or "conceptus" or "embryo") and speak of the "pregnant woman" rather than the "mother." There is little mention of abortion at all—rather, the preferred phrase is "termination of pregnancy." These terminological strategies, while not in themselves really arguments at all, nonetheless have persuasive power. When the

¹The designations "pro-life" and "pro-choice" are of course examples of successful rhetorical strategies.

physician is discussing possible abortion with the patient or the family, it can be helpful to pay attention to the words that are used.

If challenged on the claim that the fetus is a person, and that it therefore has full moral status, the defender of the traditional argument plausibly responds that the category of "person" is coextensive with the category "living human being." Since the fetus is alive and is a member of the species *homo sapiens sapiens*, it qualifies as a living human being and hence as a person—"with all the rights thereunto appertaining." It should be remembered, too, historically speaking, that this discussion came hard on the heels of the Civil Rights movement in the US—a time in which it had become all too clear that for centuries African Americans had been denied fundamental rights because of a morally irrelevant feature—race. It was important to emphasize that since black people are human beings, they have full moral status—and that that's all that matters with regard to the possession of rights. How could one deny fundamental rights to a human being?

The critic of the traditional argument, on the other hand, denies that a fetus—especially in the early stages, when it consists of a few dozen or a few thousand cells—has a moral status equal to that of an adult person. It is indeed alive (it's not dead) and is indeed a human being (it's not a tiger or a salamander). But in the view of the critic the fetus's functional underdevelopment and the fact that it is completely dependent upon (and located within) another human being lessens its claim to full moral status.

Because of the initial plausibility and political salience of the position of the defender of the traditional view—the view that a living human being is *eo ipso* a person and thus the bearer of full moral status—the burden of proof falls on the critic of that traditional argument. The 1970s and 1980s saw a series of attempts to pry apart the claim that a fetus is a living human being from the claim that the fetus is the bearer of full moral status [3–5]. The authors in question often note that "living human being" is a biological category, and that whether an individual belongs in *that* category is a straightforward scientific question. Whether an individual is a person and thus the bearer of full moral status is, however, a *moral* question and presumably to be answered not by biology but by ethical/philosophical reflection.

Mary Anne Warren undertakes to answer this question in a widely read and often cited 1973 article entitled "On the Moral and Legal Status of Abortion" [3]. Warren asks, "...how are we to define the moral community, the set of beings with full and equal moral rights, such that we can decide whether a human fetus is a member of this community or not?" She suggests that a fruitful way to think about this question is to imagine a space traveler who lands on a distant planet and encounters creatures unlike any he has ever seen. Rather than ask if they are human beings (which they manifestly are not), Warren thinks that the space traveler should ask if they are people in the moral sense. (Warren uses "people" as the plural of "person"):

If he wants to be sure of behaving morally toward these beings, he has to somehow decide whether they are people, and hence have full moral rights or whether they are the sort of thing which he need not feel guilty about treating as, for example, a source of food [3].

Warren offers five characteristics that she thinks are central to an individual's being a person—characteristics that the space traveler should look for in the creatures he has newly encountered in order to discern whether they are persons deserving full moral status. The five characteristics are as follows: consciousness; reasoning, self-motivated activity, capacity to communicate, and the presence of self-concept. Granting that it might not be necessary to have all five of these traits, and aware that these traits can be hard to define and hard to discern based strictly on observation of behavior, Warren nonetheless confidently asserts that any creature who has *none* of these capacities could not possibly be considered a person possessed of full moral status.

I consider this claim to be so obvious that I think anyone who denied it, and claimed that a being who satisfied none of [these characteristics] was a person all the same, would thereby demonstrate that he had no notion at all of what a person is—perhaps because he had confused the concept of a person with that of genetic humanity [3].

Since a fetus is possessed of none of these five characteristics, Warren concludes that a fetus cannot possibly be a person in the full moral sense. And if that is correct, premise 2 of the traditional argument is shown to be false, and the argument fails.

Warren seeks to formulate criteria for personhood that are not just criteria for belonging to the human species. Her criteria lead to the conclusion that the fetus is not a person, and hence vindicate her view that abortion is not always wrong. But it raises problems of its own. Since being a member of the species *homo sapiens sapiens* is neither necessary nor sufficient for being a person, on her view, there may be other humans who are not persons and persons who are not human. She readily grants, for example, that, "A man or woman whose consciousness has been permanently obliterated but who remains alive is a human being which is no longer a person" [3]. It was immediately pointed out to Warren that newborn human beings also fail to satisfy any of her five criteria, and so her argument would seem to justify infanticide. She grants that the newborn is not a person, according to her criteria, and hence that it does not have a right to life that would be violated by killing it. Nonetheless, to avoid the unwanted and uncomfortable conclusion that infanticide is permissible, she argues that infanticide would in most cases be immoral on other grounds.²

Opponents of this kind of position often invoke the fetus's *potential* in order to provide grounds for the obligation to respect its life [8]. A fetus does not have consciousness or rationality, but it does have the potential to develop these traits and thus has the potentiality to become a person, and (according to these advocates) should thus be recognized as possessing the right to life. Warren emphatically resists this line of argument [6]. The fact that the fetus has the potential to develop consciousness and rationality means only that it has the potential to become a person and the potential to acquire a right to life. Having the potential to acquire a right, however, does not mean that one has the right, nor that others have a duty to respect the right that one does not yet have.

²"...infanticide is wrong for reasons analogous to those which make it wrong to wantonly destroy natural resources or great works of art" [3].

Warren's conclusions were not widely accepted, but her approach was quite influential and focused attention on the question of what characteristics something must have in order to qualify for full moral status. She is one of several authors who offered criteria that differed from simply membership in the human species. Baruch Brody, for example, offered "having a functional human brain" as a necessary and sufficient condition for personhood, and reckoned that a fetus would satisfy that condition sometime late in the first trimester of pregnancy [4]. Brody's criterion, like Warren's multi-pronged set of conditions, allows that an entity can gradually acquire, over time, the traits that are characteristic of personhood. Whether one is a member of the human species is presumably an all-or-nothing matter. But perhaps the attainment of full moral status is a developmental process such that one might gradually grow toward full personhood. This idea—of gradually acquired rights and moral status—will be important in the Supreme Court's *Roe v. Wade* decision.

2.3 The Obligation Not to Take Life

The discussions of the moral status of the fetus called into question the second premise of the traditional argument—the claim that the fetus is an innocent person. Simultaneously, critical reflection was brought to bear on the first premise as well—the claim that it is always wrong to take the life of an innocent person. The most important contribution to this discussion came from Judith Jarvis Thomson, whose extremely influential 1971 article entitled "A Defense of Abortion" re-cast the issue in a way that sheds important light on the question [7].

Thomson begins by granting, for purposes of argument, that the fetus is, from conception, a person with full moral status—that is, she grants premise 2 of the traditional argument. Her basic insight is that the prohibition of abortion not only requires that the pregnant woman refrain from killing the fetus but also that she continue, for 9 months, to make her body available to the fetus as a life-support system. These two requirements are quite different, and, in Thomson's view, this difference makes an important moral difference in the abortion debate.

Her argument begins with a fanciful story. Suppose that you were kidnapped during the night by the Society of Music Lovers, were drugged, and then awakened to find yourself hooked up to a famous violinist who was extremely ill and who needed to share your circulation system for 9 months in order to recuperate. The details of the fanciful thought-experiment can be filled out *ad libitum*: Something about your blood type and genetics makes it the case that only your circulation system will work for him. Importantly, after 9 months he will be recovered, you two can be unhooked and he can return to his busy concert schedule while you go about your life. But if you unhook yourself from him now, he will certainly die.

Thomson asks whether, in the fictional scenario, one is morally required to stay in bed for 9 months in order to provide life support for the violinist. He is certainly a person with full moral status, and he is certainly innocent (he didn't kidnap you or hook you up to himself). And it is clear that if you unhook yourself from him, he

will die. Thomson grants that it would be very nice of you to agree to stay and continue to provide life support for the violinist, but it is clear to her that you do not commit wrongful homicide if you unhook yourself and walk away. The violinist has a right to life (as do we all), but he does not have a right to the use of your circulatory system to sustain his life. That circulatory system is, after all, yours, and only you can decide to grant him permission to use it. If you do allow him to continue to use your body as a life-support system, this is a kindness on your part. It is not something he can claim that you have a duty to do based on his right to life.

The kind of argument by analogy that Thomson employs here is widely used in applied ethics. If our moral intuitions are not clear regarding the rightness or wrongness of some act or practice, the author produces a scenario—realistic or farfetched—in which we have a clearer sense of the morality of the situation, and then maintains that the scenario is analogous in morally relevant respects to the act or practice that we are unsure about. Discussion and criticism then often arise over whether the imagined scenario really is analogous in the important moral respects.

In the case at hand, Thomson is claiming that a pregnant woman is in relevant respects comparable to you, the victim of the Society of Music Lovers. Critics immediately objected that the analogy holds (if at all) only if a woman has become pregnant as a result of rape, since you were forcibly abducted and hooked up to the violinist against your will. In more typical cases a pregnancy results from a sexual act voluntarily undertaken by a woman with knowledge that pregnancy can result. So, the critics say, most cases in which abortion is under consideration are entirely unlike Thomson's fanciful scenario [3].

Thomson replies that there are many other cases in which a woman can be said to have become pregnant "against her will"—most obviously cases of contraceptive failure. A woman makes a good-faith effort to avoid conception, and nonetheless finds herself pregnant. If you knew that the Music Lovers were lurking out there, and you undertook reasonable measures to avoid falling into their hands, they might still manage to get you despite your efforts to avoid capture. And if they did, Thomson thinks you clearly still would not have a duty, derived from the violinist's right to life, to allow your body to be used as life support for him.

One might also criticize the analogy by pointing out that while on rare occasion continuing a pregnancy can require that the woman stay in bed for the duration, most pregnancies are not like that at all. In most cases she can continue to live her active life with only relatively minor inconvenience up until very close to delivery. Thomson agrees that such unproblematic pregnancies make it easier for the woman to continue the pregnancy if she chooses. It would be relatively easy in such a case for her to allow the fetus to continue using her body as a life-support system—i.e. for her to do the nice, generous thing—should she decide to do so. But it remains the case, according to Thomson, that only she can make that decision, and the fetus's putative right to life does not oblige her to do it.

Finally, critics objected to the suggestion that the profound relationship between a mother and her unborn child is in any way analogous to the relationship between a kidnapping victim and a sick stranger [9]. On their view, the suggestion that these are in any way similar is perverse—and this deep *disanalogy* vitiates the entire

thought experiment. Thomson would agree that in the ideal case the expectant mother very much wants the child and is motivated by love to do whatever is required to ensure its thriving. But not all pregnancies are of this ideal kind. For various reasons—the circumstances of conception, the woman's family or financial situation, her health, the fetus's expected condition—the ideal relationship might not obtain between expectant mother and developing fetus. Thomson is exploring the moral obligations that are imposed upon the woman by the fact that the fetus is a person with a right to life. Thomson finds these duties less extensive and less demanding than the traditional argument would have us believe.

Thomson's argument was influential in its day, but it should be noted that it does not, by itself, open the gates to "abortion on demand." It matters, morally, whether reasonable measures were taken to avoid pregnancy. And while Thomson's argument justifies a woman's refusal to let a fetus continue to use her body for life support, it does not give her the right to demand the fetus's death. When the fetus is able to survive on its own (i.e. at viability) the most the woman can ask is that it be removed from her. It could then, presumably, be made available for adoption.

2.4 The Current State of the Debate

The articles and arguments that we have been discussing stem from the early 1970s—nearly 50 years ago. Remarkably little has changed in the state of the discussion since that time. The traditional argument still has many adherents. Often, for a given individual, the premises of the argument are buttressed by religious doctrines, including metaphysical views about ensoulment. But even for the non-religious proponent, the soundness of the traditional argument continues to seem well-nigh self-evident. On the other side, many continue to find the idea that an early stage fetus has the rights—especially the right to life—of a mature adult simply incredible. After all, it has none of the qualities or abilities requisite for participation in the moral community, and hence no plausible claim to full moral status. And finally, there are very many who hold that a woman's rights over her own body clearly encompass the right to decide who may and who may not use that body as a life-support system. It is not, after all, a resource to be deployed at the community's behest for the aid of those in need. It is her body.

There is some discussion among these groups, but very little productive dialogue. This helps to explain why, although the Supreme Court issued a ruling in 1973, the legal battle over abortion and reproductive rights has not gone away and is, arguably, more contentious than ever. Though the foregoing arguments may not be concretely applicable to the pediatric cardiac physician, the state of the law—state and federal—will determine the constraints and conditions under which the patient and physician deliberate in tough pre-natal cases. The legal state of play remains unsettled, but the recent legal-historical background is important for understanding what is happening now and what may happen in the near future.

3 Abortion and the Law in the United States: Beginning with *Roe*

From the 1880s until the 1960s abortion (except to save the life of the woman) was prohibited by law in every state in the US. The historical conditions that led to this ban are complex—involving the prevalence of midwives, the professionalization of medicine, the influence of the churches, conservative sexual mores and concerns for maternal health. Of course, during these years of prohibition there were tens of thousands of abortions performed annually nonetheless—in sterile operating rooms under the guise of diagnostic or therapeutic dilation and curettage, and on kitchen tables with coat-hangers and knitting needles [10].

In the mid-twentieth century a movement for reform of the abortion laws began—led by doctors and lawyers. In 1959 the American Law Institute proposed a model law that would make abortions legal in cases of rape or incest, fetal abnormality or threat to the health of the mother. From 1967 to 1972 several states passed laws along the lines of this ALI model [11]. Meanwhile, the Supreme Court, in its 1965 decision *Griswold v. Connecticut*, struck down a state law in Connecticut that prohibited married couples from using contraception. The court based its ruling on an implied right to privacy that the justices discerned in the penumbras of the 9th and 14th Amendments [12]. This was important, for Griswold's finding on the right to privacy provided a central precedent for *Roe*.

Early in 1973 the Supreme Court issued its decision in *Roe v. Wade* [13], based on its judgment that the constitutional right to privacy "...is broad enough to encompass a woman's decision whether or not to terminate her pregnancy" (p. 153). Striking down laws in nearly every state, the decision outlined a structure imposing limitations on what states could do to restrict abortion. Adopting a trimester system, the court ruled that a woman's right to choose, in consultation with her physician, to have her pregnancy terminated could not be limited during the first trimester. In the second trimester reasonable regulation by the states is permissible, but only in the service of women's health. After the fetus attains viability—which the Court reckoned to be about the beginning of the third trimester—the states may regulate to protect the interests of the fetus (which the court usually refers to as "potential life"). Even in the third trimester, however, abortion must be permitted if required for the preservation of the life or the health of the mother (p. 163). The Court also explicitly held that "the unborn" do not qualify as "persons in the whole sense" (p. 162).

It is interesting to note that the Court, in its decision, adopted a kind of compromise position, incorporating elements similar to the arguments of Warren and Thomson as we discussed them above. Denying that the fetus is a "person in the whole sense," the Court nonetheless adopts a kind of gradualist position, arguing that the state's interest in protecting potential life grows in the course of pregnancy until the point of viability. The Court does not explicitly say that at the point of viability the fetus acquires a "right to life," but it does say that the states' interest in protecting its life has become so strong that it may override the concern for the pri-

vacy or the liberty of the woman. The states can rule, if they wish, that post-viability abortions are completely prohibited except when necessary to preserve the life or health of the mother. This ruling reflects the idea that the fetus, in the early stages, has no moral status that warrants or calls for state protection at all. But the status of the fetus grows gradually until the point of viability, at which point it "has the capability of meaningful life outside the mother's womb" (p. 163) and warrants serious state protection. Reflecting the common wisdom of 1973, the court held that viability "is usually placed at about 7 months (28 weeks) but may occur earlier, even at 24 weeks" (p. 160).

The governing principle in the whole decision, however, is the paramount importance of the woman's right to privacy and, by extension, self-determination. The state is not justified in interfering with her decision-making in the early stages of pregnancy because there is no competing interest that could outweigh her right to make decisions for herself about what is essentially a private matter. That powerful right is protected by the Constitution. Gradually, though, the fetus grows until it attains viability, at which point it, too, deserves protection by the state. The last trimester—when the fetus has become viable—is the period during which there is a potential for serious conflict between the woman's privacy and self-determination and the "potential life" of the viable fetus. The Court is pretty clear—after viability the states can override the woman's right to privacy and self-determination in order to protect the fetus's potential life. She cannot simply choose to have an abortion in the last trimester. But even in the third trimester the states cannot prohibit abortions when the life or health of the mother is at stake.

Many of the cases that confront the pediatric cardiac physician late in a pregnancy do not involve a direct threat to the health or life of the mother, but rather serious developmental abnormalities in the fetus. Roe did not directly address such cases, but they have come under scrutiny in court-testing of more recent legislation. We will return to such cases momentarily. First, though, let us look briefly at further developments in case law that have arisen in the years since *Roe*.

Soon after *Roe* was announced a number of states undertook to place restrictions of various kinds on the new right to abortion. Each of these state laws underwent federal review—sometimes at the Supreme Court level—and in the process they clarified the details and contours of the Roe decision. So it was determined that states could not require that abortions be performed in hospitals (*Roe v. Bolton*—1973), could not require that the woman obtain her husband's consent (*Planned Parenthood v. Danforth*—1976), could not require a woman to receive counseling in which she is informed that "the unborn child is a human life from the moment of conception" (*Center of Akron v. Akron Center for Reproductive Health*—1983).

Two important decisions altered the provisions of *Roe* in more substantive ways. In *Webster v. Reproductive Health Services* (1989) the Supreme Court upheld a Missouri law that provided (among other things) that if a physician has reason to believe that a woman has been pregnant for at least 20 weeks, he/she is required to conduct tests to discern whether the fetus is viable. This provision rejected *Roe's* trimester analysis of a pregnancy and thereby suggested a flexibility in its inter-

pretation that opened the door to other attempts by state legislatures to impose restrictions on abortion—restrictions that had, until then, been rejected as unconstitutional [14].

More important still was the decision in *Planned Parenthood v. Casev* (1992) [15]. The United States (Justice Department) sided with the state of Pennsylvania in urging the Supreme Court to use this case as an occasion to overturn Roe v. Wade. The Court refused to do so and concluded (much to the disappointment of antiabortion activists) that "the essential holding of Roe should be reaffirmed" (p. 846). Nonetheless the Court upheld a number of regulations and restrictions on abortions prior to the viability of the fetus—restrictions that would previously have been overturned as inconsistent with Roe. For example, the Pennsylvania law required the physician to inform the woman seeking an abortion of the nature of the procedure, the stage of her pregnancy, the risks inherent in both abortion and childbirth, and the alternative of carrying the pregnancy to term. Basing its thinking on the premise that a more informed choice is a more autonomous choice, the Court concluded that a state could also require that she be informed that "...there are philosophical and social arguments of great weight that can be brought to bear in favor of continuing the pregnancy to full term..." (p. 872). The Court also upheld the state's requirement of a 24 hours waiting period after the provision of the aforementioned information, before going ahead with the procedure. All of the foregoing is justified on the basis of the "informed consent" requirement. Most important is the Court's embrace of a new criterion for the acceptability or unacceptability of state regulations and restrictions on early-term abortions. The Court held that states may impose restrictions on pre-viability abortions so long as they do not constitute an "undue burden" on a woman's exercise of her right to have an abortion. This standard has opened to door for a number of subsequent state laws testing the limits of what counts as an "undue burden." The court also further loosened Roe's trimester analysis, uncoupled viability from the 28 week point, and made viability dependent on technology and the varying judgments of state legislatures (p. 881).

Over the decades since *Roe* state legislatures have passed numerous laws designed to rein in abortion rights. Most of these have been rejected as unconstitutional in federal courts, though, as seen in *Webster* and *Casey*, there has been some blurring of the bright lines drawn in the original decision. In addition to the battles in the legislatures and the courts, there have been endless hard-fought campaigns between "pro-life" and "pro-choice" activists seeking to win over public opinion. Abortion has become a partisan political issue and an important rallying cry for religious conservatives as well as for women's rights groups. In short, almost half a century after the initial decision, *Roe v. Wade*, in a somewhat weakened form, remains the law of the land, and the US remains as divided on the issue of abortion as it has ever been.

As this chapter is written (September 2019) anti-abortion forces, who sense that a new presidential administration and a recently altered Supreme Court balance will be less friendly to abortion rights, are mounting challenges in a number of states across the country. This past spring seven states passed "heartbeat bills" banning abortions after the point at which fetal heartbeat can be detected (6 or 7 weeks into

pregnancy)³ [16]. Defining the fetus as a legal person "for homicide purposes," Alabama went all the way and banned all elective abortions in the state, including cases in which the pregnancy is a result of rape or incest [18]. The only exceptions allowed by the Alabama law are cases in which the fetus suffers a lethal anomaly or in which continuation of the pregnancy would present a "serious health risk" to the woman. (The law makes it clear that mental illness or "emotional condition" are not sufficient grounds unless two doctors certify that these could lead to the death of the woman). If an abortion takes place outside of these very narrow conditions, the physician who performs the procedure is guilty of a felony and can be sentenced to a maximum of 29 years in prison [19].

All of these laws (and many others) are designed to be unconstitutional under *Roe* in order to provoke a challenge in the federal courts which, their proponents hope, will be appealed up to the Supreme Court and will provide the occasion for the Court to overturn *Roe v. Wade*. At this moment, these laws are under review and have not yet taken effect. There is no way to predict the future course of the appellate process, but it is certainly possible that the current Court, with its 5-4 conservative majority, may alter or reverse central provisions of the 47-year-old legal structure based on *Roe*.

4 Late-Term Abortions

Before concluding the survey of abortion and the law, we must consider the special difficulties posed by late-term abortions. As noted above, the trimester structure adopted by the Court in *Roe* gave special attention to the third trimester, during which the fetus was assumed to be viable (or approaching viability). In that period the woman has had time to exercise her right to terminate the pregnancy if she wishes, and the fetus, by virtue of having acquired "the capability of meaningful life outside the mother's womb," has gained a status that the state has a serious interest in protecting.

As time has passed and technology has improved, the point of viability has moved earlier. In 1973 it could be assumed that viability occurred around 26 weeks; now it is closer to 24. But ascertaining whether a given fetus has reached the point of viability is not an exact science, and estimates have to be made on a case-by-case basis. Many states, invoking the viability standard, have passed laws that ban abortions after 22 or even after 20 weeks. These usually include an exception for protecting the life and (in most cases) the health of the mother. A few mention, as another

³Some experts dispute that what is detectable at 6 weeks' gestation should be referred to as a "heartbeat." Dr. Ted Anderson, president of The American College of Obstetricians and Gynecologists, says calling the activity a heartbeat is "misleading." "What is interpreted as a heartbeat in these bills is actually electrically-induced flickering of a portion of the fetal tissue that will become the heart as the embryo develops," Anderson said in a statement [17].

exception, lethal fetal anomaly. Finally, there is a group of twenty states that ban abortion after viability, without specifying a time-frame [19].

Since late-term abortions are more difficult, given the size and developmental stage of the fetus, the actual procedures whereby the abortion is effected have come under scrutiny (and under regulation). Most notorious is the procedure called intact dilation and extraction and known in the popular press and in antiabortion activist circles as "partial birth abortion." In this procedure the cervix is somewhat dilated, and the fetus extracted in the breach position so that the limbs and trunk emerge first. Then the contents of the cranium are drawn out via cranial incision and suction so that the skull can be more easily collapsed for extraction through the cervical opening. This procedure is sometimes preferable to the alternatives because there is less danger of fragmentation of bones that can injure the cervix [20].

Opponents of this procedure have dubbed it "partial birth abortion" because much of the body of the fetus emerges from the cervix prior to the skull incision which causes death. The description sounds gruesome and the line between the procedure and infanticide seems negligible to the abortion opponent. Consequently a number of laws were introduced banning the procedure, but each one was struck down by federal courts (including the Supreme Court), most notably by a 5-4 decision in 2000—in part because the plaintiffs argued that the procedure is sometimes safer for the mother, because the laws often did not include an exception for the health of the mother and because the ban replaced the physician's medical judgment regarding what procedure is called for with the medically untutored judgment of state legislators. In 2003 however, the US Congress passed a federal prohibition entitled the "Partial Birth Abortion Ban Act" and in 2007, by a 5-4 vote, the Supreme Court upheld it⁴ [20].

Much of the public discussion of abortion in recent years has been focused on late term abortions and especially "partial birth abortions." It should be noted that the amount of public attention on late abortions is way out of proportion to the percentage of abortions that take place in this time frame. The CDC reports the following numbers from the year 2015:

The majority of abortions in 2015 took place early in gestation: 91.1% of abortions were performed at ≤ 13 weeks' gestation; a smaller number of abortions (7.6%) were performed at 14-20 weeks' gestation, and even fewer (1.3%) were performed at ≥ 21 weeks' gestation [21].

Loosely extrapolating from these numbers, and assuming 23 or 24 weeks as a reasonable estimate for viability, we see that fewer than 1% of abortions take place after viability. With an estimated 862,000 [22] abortions each year, 1% is a significant number—8600 procedures. But it is much smaller than the public discussion would lead one to believe.

⁴Between 2000 and 2007 Sandra Day O'Connor retired from the Court and was replaced by Samuel Alito.

5 Abortion Ethics and Pediatric Cardiac Medicine

The relentless public debate makes it clear that neither religious pronouncements nor applied ethicists' analyses have brought consensus regarding the moral status of abortion. Moreover, developments in a dozen state legislatures in just the last year suggest that the legal status of abortion is more uncertain in the US than it has been in half a century [17]. This is the fraught environment in which obstetricians and pediatric cardiac specialists sometimes have to inform parents, after prenatal diagnosis, that the developing fetus is afflicted with a serious congenital heart defect. The mother is suddenly confronted with an unexpected and anguished choice. This is the point at which pediatric cardiac medicine and the issue of abortion merge. We will discuss, in a general way, some unusual issues that arise from this convergence.

The mother may decide, under the circumstances, to terminate the pregnancy. Or she may decide to carry it to term and to deal with further decisions as they come. The decision is the mother's to make, based on two strong considerations. First, as discussed above, she has a Constitutional right to privacy which is broad enough to cover her right to make this decision (prior to fetal viability). Secondly, as the parent, she is entrusted with the power to make this decision based on the assumption that she has the fetus's well-being at heart and will act in its best interest. The physician's chief ethical obligation is to provide the woman with complete and accurate information, to the extent that that is possible, and to be supportive of her whatever she should decide to do. But as is often the case, even the first of these—ensuring informed decision-making and informed consent—can be a challenge.

Improvements in echocardiographic technology have enhanced the prenatal detection rate for congenital heart defects (CHD) and critical congenital heart defects (CCHD). It is usually possible to judge the extent of the malformation, though often with limited precision and confidence [23]. Thus, even though one can reliably predict the kinds of interventions that will be required at (and after) birth and can know the statistically established survival rates for those procedures, it is not possible to predict the outcome in this individual case. In order to make an informed decision regarding the termination of the pregnancy, the mother might want to know (1) what surgical interventions will be required if the child is born at full term; (2) how much pain and suffering is associated with these procedures; (3) what lifelong morbidities will beset the child; (4) how the quality of life will be impacted; (5) what special care the baby will require, and at what cost; (6) how long his or her life will last. In cases of serious defects, such as hypoplastic left heart syndrome (HLHS) or tricuspid atresia (TA), even with the best of intentions and the best of modern medical science the physician cannot provide answers with great certainty to these questions [23]. There is of course always some uncertainty in medical prognosis, and in cases such as these, that uncertainty is increased. The physician—presumably an obstetrician—must do her best, with the help of

colleagues,⁵ to convey the relevant facts to the mother—including the fact that there is significant uncertainty regarding these putative facts.

Since the mother's decision may involve abortion, there are additional factors that have to be considered as well—considerations that may complicate the effort to secure informed consent. For example, depending on the stage of the pregnancy there may be an urgency to the decision process. The near-total legal prohibition of post-viability abortion in the US means that if a decision is to be made to terminate the pregnancy, it must happen before the 24th or 22nd (or in some states, the 20th) week. This temporal urgency can present a problem, for studies show that many parents are so emotionally distraught and distracted at first being informed of the diagnosis that they do not hear, process and remember well what they are told. They need time to digest the bad news, to adjust emotionally, to talk with others, to think of and ask questions, to do research, to calm down. Getting questions answered may require multiple meetings with their obstetrician and with cardiac specialists—all of which takes time. And the clock is ticking toward viability.

In addition, if the mother is to be adequately informed of her alternatives, she will have to be informed of what is involved in the abortion procedure should she choose that option. But the same advanced development of the fetus that makes specific diagnoses via echocardiograph possible also makes the abortion process lengthy and more emotionally trying—for many women painful just to hear about, and more wrenching to endure. Abortion after 16 weeks usually involves inducing a miscarriage—expelling the fetus (non-viable at this stage) by normal vaginal delivery in a process that takes hours. If the pregnancy has advanced to 20 weeks it is recommended that the delivery be preceded by feticide—an injection into the uterus that will stop the heartbeat of the fetus, ensuring that it is dead on arrival. In many hospitals in the US (and as a standard practice in Great Britain's NHS) the lifeless fetus is wrapped in a blanket and the mother is offered the option of holding it after its emergence. She may also be asked to give consent to an autopsy [24].

In a study [26] of couples' retrospective evaluations of the information that they had received after being informed of a positive diagnosis of congenital deformities, most declared themselves satisfied with the level of clarity and detail offered by the specialists in the diagnosed condition. But a number of the respondents who chose to terminate the pregnancy criticized the scarcity of information they had been provided regarding the abortion procedure itself. It is easy to understand why physicians would not want to go into detail regarding the process, for it resembles all too closely the normal process of childbirth and visualizing the scene might intensify feelings of maternal attachment and grief,

⁵Chapter 13 of this volume – "Informed Consent in Fetal Hypoplastic Left Heart Syndrome" – provides a thoughtful discussion of the different contributions (and occasional unwitting biases) that the different medical services (pediatric cardiologist, cardiac surgeon, etc.) might bring to the informed consent process.

possibly making the decision more difficult. Still, respect for her autonomy requires that she be informed of the process should she choose that option.

As noted in Chap. 13 of this volume – "Informed Consent in Fetal Hypoplastic Left Heart Syndrome" – in some institutions, for some especially critical defects such as HLHS, there exists the possibility of taking the pregnancy to term, delivering the baby and then choosing "comfort care" (neonatal hospice) instead of active life-saving intervention. If the pregnancy is already beyond the point of viability, and abortion is no longer a legal possibility, the mother should be informed that the comfort care option will be available when the time comes. She might choose it even if the pregnancy is at an earlier stage and termination is still available as an option. She might tell herself that it would provide more time during which the fetus's condition might unexpectedly (perhaps miraculously) improve, or that it might be possible to obtain a more detailed view of the deformity at that time, providing information that would make her decision easier. If these are misinformed and unrealistic hopes on her part, she should be told as much; but they may govern her deliberation, nonetheless. Some patients might find the comfort care option morally preferable for a different reason: abortion involves taking active steps to bring about the death of the fetus, whereas comfort care can be seen as "letting nature take its course" or "letting the baby die of natural causes." Current law that absolutely prohibits active euthanasia while permitting the withholding of lifesaving treatment in extreme cases suggests that the distinction between "killing" and "letting die" is taken very seriously in our law and morality. The pregnant woman in this case may be motivated by a commitment to the moral importance of that distinction. On the other hand, the decision might go the other way—for previability abortion and against comfort care—based on the distinction between a fetus (in the abortion) and a baby (in the comfort care scenario). Despite the best efforts of pro-life activists to elide this distinction by insisting that personhood begins at conception, most Americans continue to recognize an important difference in moral status between a pre-viable fetus and an infant (as does the Supreme Court—as of now) [25].

The mention of pro-life activists reminds us that the controversy over abortion rights is very much alive in the American public square. Advocates on both sides have strong feelings, and the fraught, rhetorically unrestrained and sometimes vicious public discussion of abortion in the US can itself be a factor in a woman's deliberations about what to do when confronted with a prenatal diagnosis of a critical congenital heart defect. Patients hungry for more information, waiting for an appointment with a specialist for more detailed explanation, are likely to turn to the internet. But on topics relating in any way to the subject of abortion, the internet can be a slough of misinformation, gory pictures, political and religious exhortation and ad hominem argumentation. If informed decision-making regarding termination of pregnancy is the goal, the internet is as likely to be an obstacle as a resource. The physician can help by providing the patient with a list of sober, accurate websites that will inform rather than frighten or proselytize.

The physician should remember, too, that the decision-maker is part of a social milieu in which it might be much easier to explain and (if need be) defend one deci-

sion rather than the other. She might, for example, be concerned about what she will say to those whom she recently happily informed of her expectant status, should she choose to terminate the pregnancy. She may know that abortion is stigmatizing in her social circle and may feel the need to tell a different story—perhaps a story of spontaneous miscarriage. An interesting article in the *Journal of Obstetric, Gynecological and Neonatal Nursing* (2005) bringing together results from a number of studies of the deliberative processes of expectant women confronting a positive diagnosis of congenital birth defects, reports that women who choose termination tend to dissociate themselves from women who sought abortions for unwanted pregnancies and associate themselves with women who have lost wanted pregnancies through miscarriage [27]. The sensitive physician will listen to the way the mother frames the narrative that she tells herself—the perspective taken, and the vocabulary used. To the extent that she can—constrained by the requirements of basic honesty—the empathic physician will support the decision-maker in her way of conceptualizing her dilemma.

If abortion is legal, it must be presented as an acceptable option. The physician who is providing information and counsel should ideally not seek to sway the patient one way or the other based on the physician's own preferences or moral convictions. The idea is to support the patient's autonomy. But in our world—a world in which people have strong convictions on both sides of the abortion question—it can easily happen that the physician has principled moral objections to all abortions except those performed to save the life of the mother. In light of such objections, she might be unwilling to perform or participate in the abortion procedure should the mother choose that option. 6 In such a case, if that's the mother's decision, the physician is obligated to refer her patient to a colleague who does not have similar scruples. That might address the immediate practical problem, but the issue goes deeper than that. By telling the patient that she will not participate in an abortion procedure, the physician lets her patient know that she sees one of the options offered the patient to be morally unacceptable. One might respond that the physician's belief that abortion (under these circumstances) is morally repugnant is just another piece of information for the patient to consider as part of the complex informed consent process. That is not quite right, though. The relationship of trust between patient and physician gives the latter's words special weight, and her status as a doctor gives her opinions the appearance of expertise. But on moral questions where there is no consensus, no one is in a position to claim expertise.

To conceal from the mother, during her deliberations, the fact that the physician is unwilling to participate in an abortion is to fail to provide the patient relevant information. After all, who performs the operation might be a significant consideration to the mother. On the other hand, to reveal the fact risks influencing her decision in an inappropriate way. A similar, though less personal issue arises if

⁶Federal and state laws permit doctors to refuse to perform abortions on grounds of conscientious objection. This right was expanded and strengthened in May, 2019 by a rule issued by HHS according to which clinicians and institutions would not have to provide, participate in, pay for, cover or make referrals for procedures they object to on moral or religious grounds [28].

the institution (for example a Catholic hospital) refuses to allow the procedure to be performed. Practically speaking, the patient can be transferred to another facility, but the knowledge that that such a move is required will be hard to reconcile with the claim that all of the options on offer are acceptable.

6 Conclusion

Ethically and legally, abortion is a complex and difficult issue. The decision to terminate or to continue a pregnancy after positive diagnosis of a congenital heart defect has all of the usual issues related to abortion, plus more. Such a decision involves: the offspring's suffering and ultimate quality of life; the burdens on the family; a woman's right to make decisions about her body; loss, grief and disappointment. Thinking about the decision may require asking just what the status of this fetal entity is—a living human being, but not a person; soon-to-be-viable, but currently dependent on another for life support; potentially "one of us," but severely compromised in its prospects; capable of acquiring conscious self-awareness, but currently unaware that it exists at all, and hence unaware that it has anything to lose. Confused by the complexities and stirred by religious and near-religious fervor on both sides, our political system has produced a tangle of state laws (some in force and some under challenge), federal legislation and regulation, and court decisions (in force and under appeal). There is reason to fear that that legal thicket is soon to become more tangled still. And finally, the very fact that there is zealous polarization and no consensus gives rise to additional sources of concern for the mother who has decisions to make—concerns about social stigma, about the awful things she reads on the internet, about the implicit moral condemnation should her hospital or physician be among the many who refuse to participate in abortions.

In this confusing context the conscientious physician should focus on the obligation to respect the autonomy of the patient. The patient, at this pre-viability stage, is the pregnant woman. Her right to privacy and self-determination governs the scenario, and if the interests of the fetus come into consideration, she is (as parent) the decision-maker regarding that fetus's interests. The physician must provide the most complete and accurate information that she can, conveying (where possible) that all legal options are morally and medically acceptable.

References

- Riddle JM. Contraception and abortion from the ancient world to the renaissance. Cambridge: Harvard University Press; 1992.
- Lloyd GER. In: Chadwick, Mann WN, editors. Hippocratic writings. New York: Penguin; 1952.
- 3. Warren MA. On the moral and legal status of abortion. Monist. 1973;57(4):1–11.

 Brody B. Abortion and the sanctity of human life: a philosophical view. Cambridge: MIT Press; 1975.

- 5. Tooley M. Abortion and infanticide. Philos Public Aff. 1972;2(1):37-65.
- 6. Warren MA. Do potential people have moral rights? Can J Philos. 1977;7(2):275–89.
- 7. Thomson JJ. A defense of abortion. Philos Public Aff. 1971;1(1):47-66.
- 8. Williams R. Abortion, potential and value. Utilitas. 2008;20:169–86.
- 9. Schwarz S. The moral question of abortion. Chicago: Loyola University Press; 1990.
- Pence GE. Medical ethics: accounts of the cases that shaped and define medical ethics. 5th ed. New York: McGraw-Hill: 2008.
- 11. Today in Civil Liberties History (for May 21, 1959). Available at http://todayinclh.com/?event=american-law-institute-proposes-abortion-law-reform.
- 12. Griswold v. Connecticut. 381 U.S. 479. 1965.
- 13. Roe v. Wade. 410 U.S. 113. 1973.
- 14. Webster v. Reproductive health services. 492 U.S. 490. 1989.
- 15. Planned Parenthood v. Casey. 505 U.S. 833. 1992.
- Mervosh S. Georgia is latest state to pass fetal heartbeat bill as part of growing trend, New York Times, March 30, 2019.
- Law T. Here are the details of the abortion legislation in Alabama, Georgia, Louisiana and elsewhere. Time Magazine, May 18, 2019. Available at https://time.com/5591166/ state-abortion-laws-explained/.
- Alabama human life protection act. Available at https://www.al.com/news/2019/05/alabama-abortion-ban-passes-read-the-bill.html.
- 19. An overview of abortion laws as of September 1, 2019. The Gutmacher Institute's website. Available at https://www.guttmacher.org/state-policy/laws-policies.
- 20. Munson R. The "partial birth abortion" controversy in intervention and reflection: basic issues in medical ethics. 8th ed. Belmont: Thomson Wadsworth; 2008. p. 565–9.
- Center for Disease Control and Prevention (CDC). Abortion surveillance, United States, 2015. MMWR. 2018;67(13):1–45.
- 22. Guttmacher Institute. Induced abortion in the United States: September 2019 fact sheet. Available at https://www.guttmacher.org/fact-sheet/induced-abortion-united-states.
- 23. Bensemlali M, et al. Discordances between pre-natal and post-natal diagnoses of congenital heart diseases and impact on care strategies. J Am Coll Cardiol. 2016;68(9):921–30.
- 24. Termination of pregnancy after the diagnosis of an abnormality (more than 20 weeks gestation) Oxford Radcliffe Hospitals, NHS Trust. Available at https://www.ouh.nhs.uk/patient-guide/leaflets/files/110614termination.pdf.
- Montanaro D. Poll: majority want to keep abortion legal, but they also want restrictions.
 NPR June 7, 2019. Available at https://www.npr.org/2019/06/07/730183531/poll-majority-want-to-keep-abortion-legal-but-they-also-want-restrictions.
- 26. Carlssen T, Bergman G, et al. Experiences of informational needs and received information following a prenatal diagnosis of congenital heart defect. Prenat Diagn. 2016;36(6):515–22.
- 27. Sandelowski M, Barroso J. The travesty of choosing after positive prenatal diagnosis. J Obstet Gynecol Neonatal Nurs. 2005;34(3):307–18.
- 28. Cohen JK. HHS finalizes faith-based protections for healthcare workers. Modern Healthcare, May 2, 2019. Available at https://www.modernhealthcare.com/government/hhs-finalizes-faith-based-protections-healthcare-workers.