Late Abortion – Clinical and Ethical Issues

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Introduction

Although abortion has become one of the most difficult and controversial issues in Western society during the past 50 years, the performance of late abortion – after 20 weeks of pregnancy, to use one definition – is the most controversial. Even those who claim to be "pro-choice" and support women's reproductive freedom often disagree with the performance of late abortion for any reason. For those opposed to the availability of any kind of abortion services, late abortion is the most abhorrent and should not be permitted for any reason including, rape, incest, fetal abnormality or saving the woman's life.

People who question the need for late abortion services ask: Why would any woman want to end a pregnancy at such a late stage? Why do women wait? What is the possible justification for late abortion?

Medical technology over the past 50 years has not only made abortion safer, it has increased the chance for survival of fetuses born alive well before the normally expected length of pregnancy. Abortions are now routinely performed at stages of pregnancy that would have constituted "viability" in earlier times such as at 26 – 28 weeks of pregnancy. This does not account for the high risk of severe handicaps and increased risk of death suffered by severely immature infants born alive so early in gestation. The costs of caring for severely impaired infants can range up to $1,000 per day for decades, and this is not a cost that can be carried by individual families.

These are extremely complicated circumstances for medical decisions about the woman's life and health, life and health of the fetus or immature infant, and they are increasingly fraught with social, political, legal, and emotional conflicts. People with no direct or personal interest, knowledge of or stake in the outcome of such decisions but with political goals are increasingly inclined to interfere with these decisions being considered by anguished individuals and families.

Abortion is a global phenomenon known to all societies and known to have been practiced from the earliest historical times, and it is known to have been practiced by tribal societies of all kinds.[1] Although the number of abortions performed on women or by women on themselves cannot be known with any accuracy, there may be as many as 50,000 deaths annually among women due to unsafe abortion, and they account for from 9 to 15% of all maternal mortality worldwide.[2,3] Meanwhile, deaths from illegal, unsafe abortion have become almost nonexistent in the United States since 1973, when the US Supreme Court issued its ***Roe v. Wade*** decision legalizing the operation. In the United States, deaths due to abortion fell from 40 per million live

births in 1970 to 8 per million in 1976.[4] The immediate consequence of the liberalization of the New York state abortion law in 1970 was the elimination of deaths in New York City due to illegal abortion, a decline in the number of deaths associated with childbirth, and a reduction in deaths following legally performed abortion. There was also a decline in births, particularly among high-risk women, a decline in infant mortality, and a decline in the number of deaths associated with pregnancy. From 1973 to 1975, there were no deaths from abortion performed before 12 weeks of pregnancy for the first time in the city's history.[5]

From 1973 until the present, almost 60 million abortions have been performed in the United States. Of these, about 1% have been what could be defined as "late abortion." Of these, most are performed before the 24th week of pregnancy.[6]

Abortion after the first trimester of pregnancy has historically been more dangerous than early abortion, and the procedure increases in complexity and risk with each week of pregnancy.[7] The risk of death in early second trimester abortion is 15 times the risk of death in early first trimester abortion, 30 times greater at 16-20 weeks, and more than 77 times the risk at 21 weeks or more.[8] The relative risk of death in abortion increases 38% per week with each week of gestation compared to abortion up to 8 weeks of pregnancy. The risk of death of abortion at 8 weeks is about 3 per million procedures.[9]

Why do women seek late abortion? Here are some of the reasons:

- Ignorance – lack of awareness of signs and symptoms of pregnancy (especially adolescents, who are more likely to delay seeking an abortion until 15 weeks or more of gestation)
- Fear, shame, guilt; afraid to tell parents or abusive intimate partner
- Denial ("I thought it would go away.")
- Lack of money, transportation, support for early abortion
- Misinformation ("you're too [old, young, fat, skinny, etc.] to get pregnant") by patient's doctor
- Misinformation, often deliberate ("Abortion is illegal after 12 weeks.")
- Missed diagnosis (3 months testing for pituitary tumor by an endocrinologist without a physical exam or pregnancy test)
- Fetal anomaly or genetic disorder
- Physician deception / withholding of information concerning fetal diagnosis
- Threats by intimate partner or relative of violence including murder if woman seeks an abortion, especially in highly conservative cultures
- Fear of loss of intimate or protective relationship
- Frightening propaganda in an anti-abortion "pregnancy alternative" "clinic"
- False belief: "I thought abortion became illegal when Trump was elected."

A typical example is the appearance of a very young adolescent 13-15 years old accompanied by a parent who has observed that the girl is visibly pregnant. The girl has had one sexual experience with her boyfriend without contraception, may have suspected that she was pregnant, but she was afraid to tell her parents and perhaps not sure what she was experiencing. By the time the parent (usually her mother) sees the signs of pregnancy, the girl is 24 – 26 weeks pregnant or later. These cases are sometimes tragically associated with sexual abuse by a close relative such as a stepbrother or stepfather and concealment by the young woman who has been abused. Termination of the pregnancy is then accompanied by even more concern for the adolescent's mental health, requirement for counseling support both before and after the pregnancy termination, and notification of law enforcement and/or social services authorities for dealing with the family crisis and criminal investigation. The pregnancy is a threat to the young woman's life, especially because of her extreme youth, which carries higher risks of maternal morbidity and mortality. Pregnancy means interruption for normal adolescent life including schooling, and there is a need for specialized abortion care in the case of very advanced pregnancy.

Another typical situation is the young adolescent or young woman in her early 20's who is extremely athletic, in otherwise excellent physical health with irregular or scanty menses, who discovers that she is inexorably and inexplicably gaining weight, is in denial about her risk of pregnancy, and whose pregnancy is finally recognized by her mother.

At the other end of the reproductive spectrum is the woman in her late 30's or early 40's who has a deeply desired pregnancy which has been found to be afflicted by a severe fetal abnormality. Her obstetrician did a fetal anatomy scan at 20 weeks and found no abnormality, but a much later visit to the emergency room for gastrointestinal or other minor medical problem prompted an ultrasound evaluation of the pregnancy at which time the catastrophic fetal abnormality was discovered. The woman and her partner or husband make the difficult decision to terminate the pregnancy. This situation is made much more painful when the physician decides to withhold information about an early diagnosis of fetal abnormality because the physician is opposed to abortion and does not tell the patient of the diagnosis until it is too late to terminate the pregnancy under the local laws. It is quite common for anti-abortion physicians to withhold such diagnostic information so that the patient cannot obtain an abortion. This is one of the principal causes of delay in the case of a fetal diagnosis of genetic disorder or other fetal abnormality.

Then there is the case of the woman who is menopausal and thinks that she cannot conceive or who has been told by her physician that pregnancy is no longer possible. Amenorrhea is not perceived as a sign of pregnancy, and this contributes to a delay in the diagnosis of pregnancy.

Women with high risk pregnancies often seek late abortion. These include:

- Very young girls (11-15) who are often victims of rape and/or incest
- Women who are impaired physically or mentally by substance abuse
- Women with a history of physical or sexual abuse

- Older primigravidas (35-45 y/o) with fetal anomalies
- Older women with long histories of serious illness (diabetes, hypertension, obesity, metabolic or endocrine diseases, neurologic disease, myomas)

Methods of performing late abortion

Access to late abortion services depends on many factors, the first of which is the availability of physicians who are capable and willing to perform this procedure. A second critical factor is the patient's length of pregnancy at the time she presents for a termination. This often determines whether the procedure is available at all and, if so, the skill and experience of the physician and whether the physician is operating in a clinical environment that supports the increasingly complex procedure. A third critical factor is the cost. Late abortion is far more complex than early abortion, requires a much greater range of equipment and support, and requires a specialized medical staff that is highly experienced as well as being committed to offering this service. Fees are therefore higher than for early abortion. Except for some university teaching hospitals, late abortion services are not available in most private and community hospitals because the administration and leadership is opposed to this service. A fourth factor is the presence of legal obstacles. Restricting access to abortion by legislation has become the major political appeal of the Republican party in the United States during the past 45 years.

There are three principal methods for pregnancy termination in gestations advanced beyond 20 weeks. One is induction of labor as is done at term in an uncomplicated desired pregnancy. Another is the "D & E," or "dilation and evacuation," abortion, in which the physician uses instruments to dilate the cervix and empty the uterus. A third method, the one that I have developed and use, is an eclectic procedure that begins with the induction of fetal demise by means of an intrauterine fetal injection of a medication that causes the fetal heart to stop.[10] The second step is the insertion either at the time of fetal injection or the next day of a single *Laminaria* stick into the uterine cervix to begin the process of gentle cervical dilation by means of this hygroscopic material. *Laminaria japonicum* is a seaweed that grows in the sea of Japan; the stalk is cut to specific lengths and sterilized for medical use by submersion in absolute alcohol, by a sterilizing gas, or by radiation. It acts by absorbing water from the woman's body, expanding physically and thereby dilating the cervix overnight, and by causing the release of endogenous prostaglandins from the woman's tissues. These prostaglandins cause softening and further dilation of the woman's cervix. One day following the initial insertion of the first *laminaria*, that *laminaria* is removed and replaced under paracervical block with 5 or 6 new *laminaria*. On the day of the procedure, these *laminaria* are removed, the membranes are ruptured to release the amniotic fluid, thereby minimizing the risk of amniotic fluid embolism, and increasing the likelihood of uterine contractions. In my procedure, the amniotomy and removal of the amniotic fluid is followed by intrauterine placement of misoprostol, a synthetic

prostaglandin. If the patient has not had a prior cesarean delivery, a slow oxytocin infusion is begun intravenously. At that time, the patient is placed in a recovery room to await progress. When there is a presenting fetal part in the patient's vagina, or if there is some other reason to progress to an operative phase, the fetus and placenta are removed, and the uterus is explored with instruments to assure complete uterine emptying. All these procedures are performed under real-time ultrasound visualization to assure, to the extent possible, the complete removal of all products of conception. The patient receives medications to cause her uterus to contract, and she is observed in the recovery room for a period of approximately two hours. At the end of this time, she is examined again in the procedure room to confirm that the uterus is empty and that there is no evidence of uterine trauma. After that, she is discharged to her own private physician or other physician who is willing to see the patient for a follow-up exam one month after the abortion.

The major complication rate in my office in 5,000 of these procedures is 0.3%, which includes in the definition "operative hemorrhage requiring transfusion."

Fetal abnormality or genetic disorder

Among the most tragic aspects of obstetrics practice is the discovery that a desired pregnancy carries a fetal diagnosis of serious developmental abnormality or genetic disorder. Spontaneous fetal death is another painful development in a desired pregnancy. A cruel dilemma is presented in a twin pregnancy in which one twin is healthy and the other is stricken with a catastrophic diagnosis. In all these cases, the woman must decide whether to continue the pregnancy to term and have a child with a serious disorder, risk premature delivery or stillbirth, or decide to terminate the pregnancy in the safest manner possible. A twin pregnancy with a single affected fetus presents the choice of selective termination of the fetus with a poor prognosis to improve the outcome for the normal one.

Unfortunately, for a variety of reasons, the diagnosis of a significant abnormality may not be made, communicated or accepted until relatively late in pregnancy. In most of the United States, such patients then have no local, legal options for termination of the pregnancy. Although we perform pregnancy terminations for many reasons, we have served as a referral point for such patients with fetal abnormalities for over 40 years. In 2014, we reported the experiences of women coming to my office over a period of 20 years to end pregnancies because of an adverse fetal diagnosis.[11]

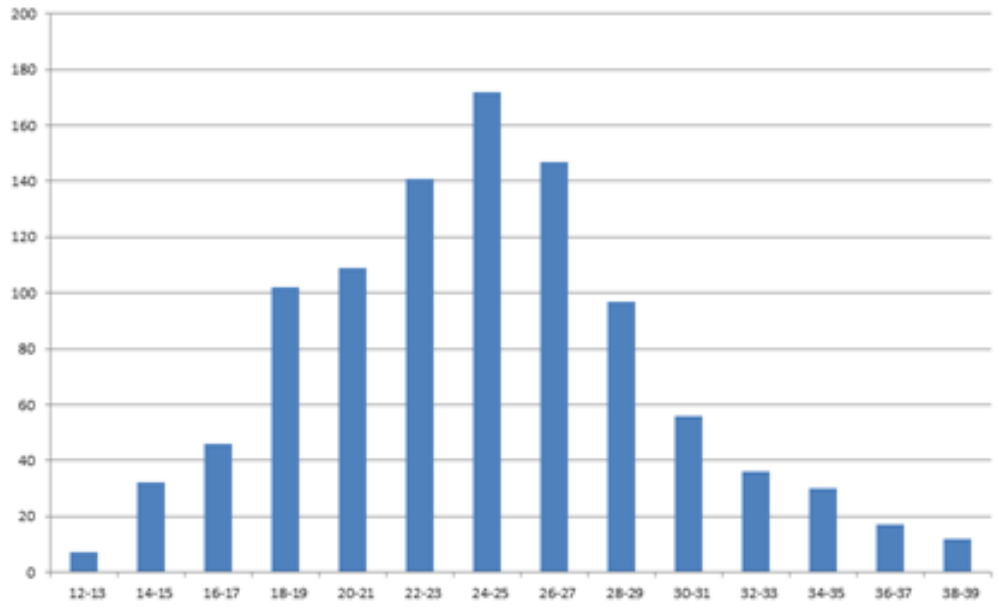
During the period of observation, 1005 women requested termination of pregnancy for reasons of fetal disorder. Most of these patients were seen during the last 15 years of the observation period. The proportion of all patients seeking pregnancy termination for fetal disorder increased over time from 2.5 to 30%. For example, of the 7,587 patients seen at my office from 4/1/92 through 8/31/97, 189 (2.5%) of the patients sought termination of pregnancy for reasons of fetal abnormality. But from 9/1/2007 - 8/31/2012, 1,251 patients were seen for pregnancy termination, of whom 375, or 30%, were requesting termination for reason of fetal abnormality. This increase

reflected a gradual change in clinic policy to accept patients with more advanced gestations, more requests for late termination of pregnancy because of fewer options being available elsewhere, and advances in fetal diagnosis.

More than 95% of patients in this series of 1005 patients had uncomplicated pregnancy terminations with complete evacuation of the uterus. 26 patients presenting with a spontaneous fetal demise were managed by a straightforward D & E procedure following serial multiple *laminaria* dilation of the cervix. In 9 patients carrying a twin pregnancy with one healthy twin, a selective termination procedure was performed in which fetal demise was induced in the twin with a poor prognosis. For 12 patients with a single live abnormal fetus, fetal demise was induced at the patient's request followed by management of the delivery by the patient's own obstetrician.

The median age of all patients in this series was 32 years with a range of from 14-47 years. The median length of gestation for all patients was 24 menstrual weeks with a range of from 12-39 menstrual weeks (Fig. 1), with older women being seen at either end of the spectrum of gestational age. Patients seeking selective termination or induced fetal demise tended to be older (median ages 34 and 35, respectively) and requesting these procedures later in pregnancy (median gestations 33 and 36 weeks, respectively).

Fig. 1 Number of patients by week of gestation



Genetic disorders were seen in approximately 40% of all patients. About one-fourth of all patients had a fetus with a neural tube defect or neurological abnormality, and approximately 9% of all fetuses had a skeletal dysplasia. In this series, 2.6% of all patients presented for termination

of the pregnancy because of a previously diagnosed spontaneous intrauterine fetal demise occurring late in pregnancy. Nine patients, diagnosed too late for the procedure to be done elsewhere, requested selective termination in a twin pregnancy that was dizygotic, diamniotic, and dichorionic because one twin had a severe abnormality. In 12 patients with a very advanced pregnancy and a single abnormal fetus, for various medical, emotional, and religious reasons, patients requested an induced fetal demise with subsequent delivery by their personal obstetrician.

There were 160 diagnostic categories of fetal abnormality, including spontaneous intrauterine fetal demise, among these 1005 patients. While some preoperative diagnoses provided by referral sources and patients were unequivocal and highly specific, others were referred with less specific information (i.e. "cerebral abnormalities," "neural tube defect"). In nearly all cases, multiple abnormalities affecting various systems were present.

The proportions of preoperative diagnosis of fetal disorder changed over time and by week of gestation, with chromosomal disorders being discovered earlier in pregnancy and other problems such as CNS abnormalities or skeletal dysplasia being discovered later in pregnancy.

In numerous cases, the patient requesting termination of the pregnancy for reasons of fetal abnormality concomitantly had a severe and sometimes life-threatening medical condition such as pre-eclampsia, multiple sclerosis, lupus erythematosis, severe hyperemesis gravidarum, massive uterine fibroids, morbid obesity, coagulation disorder, placenta previa or diabetes exacerbated by pregnancy. Many of these conditions precluded termination of the pregnancy by labor induction alone.

Zika

In 2016, there was an outbreak of Zika virus in Brazil.[12] This was discovered when there suddenly appeared many children being born in northeast Brazil with catastrophic abnormalities, principally microcephaly.[13] Abortion is illegal in Brazil and in most of South America. Most of the families confronted with this tragedy were too poor to have had prenatal care that could have given the diagnosis early enough in pregnancy for a termination to have been performed, but the lack of availability of this service makes the point moot.

In Brazil, over 2,000 cases of babies permanently damaged by Zika have been identified, and hundreds have been identified in Colombia. The number of cases that have occurred in other countries is unknown. Most of the families in South America who have been struck by this tragedy have had neither access to adequate prenatal diagnosis of Zika nor means of seeking a pregnancy termination outside of South America if it had been discovered.[14]

One couple that we saw in my office recently, however, was found to have a diagnosis of Zika by a local laboratory where they lived in South America. The couple did not live in Brazil, but the husband had work that took him close to Brazil. On discovering that she was pregnant following *in vitro* fertilization, her physicians advised her to be tested for Zika. She was positive, and he was also found to be seropositive for Zika. He apparently transmitted this to his wife via

sexual contact, and her desired pregnancy was afflicted by this virus. They were advised to go to the United States for further testing, where it was found that both fetuses in her twin pregnancy showed major abnormalities that could be ascribed to Zika. I helped them terminate their desired pregnancy at 30 weeks. Tragic as this was, they were among the fortunate ones who had the diagnosis in time and the resources to seek assistance in terminating the pregnancy.

Public health officials in the United States have been concerned that women infected with Zika in Latin America will need diagnosis and treatment once they have arrived in or returned to the U.S. Some cases have been identified, and women living in the U.S. have access to abortion that women in Latin America generally do not have. For those who do not get the diagnosis during pregnancy or cannot afford to have an abortion, the Centers for Disease Control estimates that a Zika baby with the kinds of catastrophic neurological damage that are common will have expenses of $10 million or more during its lifetime. This is a cost that is beyond the reach of nearly every family. As described in a lengthy article in the Washington Post, families living under conditions of extreme poverty, poor sanitation, and daily exposure to mosquito-borne diseases are the families whose children are mostly likely to be infected with and permanently damaged by the Zika virus, and they are the least likely to have the resources to deal with this devastating illness.

Abortion Denied

What happens to a woman when she is denied an abortion that she seeks? This is a new question in history, at least in the United States, because prior to 1967, when Colorado passed the first abortion reform law in the nation, women could not hope or expect to have an abortion if they requested one. There were no options except illegal abortions, most of which were unsafe or self-induced. Many abortions were performed more or less safely by physicians, some with the best motives, or safely by skilled lay practitioners, or unsafely by unskilled and/or unscrupulous persons with no experience. Illegal abortion resulted in uncounted numbers of "back-alley" abortions that resulted in thousands of deaths per year among women who had them. With the advent of legal abortion in many states prior to the ***Roe v. Wade*** decision legalizing abortion nationally, and throughout the nation after that decision in 1973, it became possible for women with modest means and access to obtain relatively safe abortions. But it still meant that many women could not satisfy that goal. What were the consequences for them?

In Europe, where attitudes toward abortion were more relaxed and even supportive, restrictions on abortion availability were local and unpredictable. From the early 1960's, a team of European and American psychologists and psychiatrists began a long-term study in several European countries to determine the effects of denial of abortion for women seeking to end their pregnancies. The researchers published their work over a period of several decades, with the final volume, edited by Henry P. David, published in Czechoslovakia under the title***, Born Unwanted***: ***Developmental Effects of Denied Abortion***.[15]

Comparing children whose mothers had sought abortion with identical numbers of children for whom the pregnancy had been desired in Sweden, Finland, and Czechoslovakia, the investigators found the children whose mothers had been denied an abortion had significantly more physical, psychological, and social problems than those in the control groups. These deleterious effects were apparent from birth on through the rest of their lives into adulthood. The unwanted children had more physical disabilities, more trouble in school, more trouble with relationships of all kinds as youth, and even had more problems with marriage and parenthood. The young women were more likely to have unwanted pregnancies and to have less satisfactory relationships with their own children. There was a circular effect of unwantedness that persisted in their lives.

A more recent study in the Unties States comparing the psychological effects of having or being denied an abortion for an unwanted pregnancy showed that the women "turned away" from the abortion services for various reasons such as that the pregnancy was too far advanced had more emotional stress and disturbances than the women who had received the abortion they sought.[16-18]

But what are the long-term consequences for their lives for women who have unwanted pregnancies and are unable to obtain a safe abortion? Even with more information, it would be difficult to generalize about this, but one constant dilemma that often leads to tragedy is found in the situation of young adolescent women who are pregnant as the result of their first sexual experience or with minimal life experience of any kind, sometimes against their will. These young women historically have been forced into motherhood well before they are prepared emotionally, socially, or financially, and the course of their lives is permanently shaped in a negative way. The younger the woman, the higher the risk of a fatal or seriously complicated result for her and for the baby she is forced to carry to term. From the standpoint of the human evolutionary perspective of the past several million or hundreds of thousands of years, most human reproduction has taken place at this stage of a woman's life, and most young women have survived, but we know that the risks for both mother and child are also greater the younger the woman. In modern society, it often means the interruption of education and the loss of social and economic opportunities. It makes a young woman less able to cope with the challenges of a complex industrial or post-industrial society.

Older women who find themselves pregnant in the later reproductive years may be happy only to find that the fetus they are carrying has a catastrophic abnormality or genetic disorder from which there is no hope of improvement. Older women also face higher risks of maternal morbidity and mortality as well as higher risks of infant morbidity and mortality. A woman who cannot find access to safe termination of such a pregnancy may be condemned to death if she has a major illness made worse by pregnancy, or she and her family may be burdened with unlimited expenses of caring for a severely impaired child. When I was a medical student more than 50

years ago, one of our field trips was to a facility that cared for such children for families that could afford the care. It was an enormous building the size of an athletic field house, and there were hundreds of children suffering in various degrees of vegetative or incapacitated state being kept alive until they died of some major complication or other illness. It was tragic beyond words. One of the main questions was: who pays for this care?

In other countries, women being denied abortions are often subject to catastrophic results. A young Indian woman in Ireland, a 31 year old dentist with her first pregnancy, experienced ruptured membranes at 17 weeks. Learning that there was no hope for fetal survival and delivery of a healthy baby, she asked physicians to help her end the pregnancy. She was refused because of the Irish laws against abortion. She received inadequate medical treatment, delivered a stillborn two days later, and died in septic shock two days after that. With the most basic medical and surgical procedures available in the United States and a few hours from her in England, she could have had a prompt treatment of this dangerous condition with full recovery. Her terrible suffering and shocking death were both unnecessary, but they were the clear consequence of medieval laws and attitudes in Ireland.

In India, an impoverished young woman who had been raped on the street in Patna was found to be pregnant and infected with HIV as the result. She was denied an abortion. In another part of India, a woman learned at the 26th week of pregnancy that her fetus had a catastrophic neurological disorder that caused hydrocephaly, among other things, and threatened her life if she carried the pregnancy to term, but Indian law prohibited abortion after 20 weeks. The baby has no hope for a meaningful life, is at risk of immediate death due to infection or other complication, and the couple have no means of caring for it at home.

There are countless thousands of cases of women and families who face these circumstances.

Ethical issues in late abortion

Any woman who is pregnant is at risk of losing her life because of the pregnancy.[19] The closest measure of this is the "maternal mortality ratio" expressed as the proportion of women dying during pregnancy, during delivery, or during the immediate period (30 days) after the delivery. The maternal mortality ratio in the United States at this time is about 17 per 100,000 live births.[20] By comparison, in 1920, prior to the development of modern surgery, blood transfusions, antibiotics, and drugs for managing conditions such as pre-eclampsia, the maternal mortality ratio was 680 per 100,000 live births. In 1987, the maternal mortality ratio in the U.S. was 7.2 per 100,000 live births.[20] This ratio has increased due to the increasing number of women who are becoming pregnant in their later reproductive years when they already have serious intercurrent medical conditions such as heart disease, kidney disease, diabetes, or auto-immune disease such as lupus.

The risk of death in term delivery depends on many factors, but it is about 14 times higher than the risk of death with abortion. A study of comparative mortality rates in the United States

from 1998-2005 found that the pregnancy-associated mortality rate among women who delivered live neonates was 8.8 deaths per 100,000 live births, but the mortality rate due to induced abortion was 0.6 deaths per 100,000 abortions.[21]

Another measure of risk or maternal health in pregnancy is the major complication rate. One part of the definition of "major complication rate" in pregnancy and abortion is "major unintended surgery." About 30% of all U.S. deliveries are performed by cesarean delivery, which means that the major complication rate for pregnancy is 30% or more. This becomes important in comparing the safety of term delivery with the risks of late abortion.

In my practice, there have been no deaths due to late abortion in over 5,000 cases, and the major complication rate is approximately 0.3%. This is important for the woman weighing the decision of whether to carry the pregnancy to term or to end the pregnancy. It is seldom the most important or determining factor, which is almost always whether the woman wants to have a baby or to end the pregnancy, and it is critically important to the woman who is already a mother of small children but who is considering ending a pregnancy that is complicated with a condition such as severe fetal abnormality or genetic disorder.

What of the very young adolescent woman who is healthy and who has a healthy fetus but, at the age of 12 or 13, has been impregnated by her father, her stepfather, her stepbrother, or some other member of the family? The fetus may be viable by some definition at 30 or 32 weeks, but what about the risk to her health and to her life itself? What is the justification for denying an abortion and forcing her to carry the pregnancy to term? Is she prepared to be a parent? At that age, emphatically she is not. Moreover, her risks of dying in childbirth or having a severe pre-eclampsia are greatly increased over those of a woman who is ten years older. For the adolescent, terminating the pregnancy is a life-saving operation in many ways.

What about the young woman who is addicted to any one or a variety of street drugs or alcohol or some combination thereof, and, partly due to her impaired mental function, finds herself seeking an abortion at 26, 28, or 30 weeks of pregnancy? If she does not terminate the pregnancy, she is sure to have a baby that is severely impaired and/or addicted to one of the drugs. She is herself at higher risk of death due to the pregnancy than an otherwise healthy woman. She is less prepared than most to be a mother and manage the responsibilities of parenthood. Her child is more likely to suffer from inadequate care. Should she have an abortion? Should she be denied an abortion? A major problem for her obtaining a safe abortion is that, if she is on drugs at the time she presents for treatment, she cannot legally sign a consent form. Her signature, because she is impaired, is worthless.

How about the young woman who has been raped and who has suffered such severe depression and anxiety since the sexual assault that she has been unable to seek help until she is 30 weeks pregnant? Should she be permitted to have an abortion? Should she be required to carry her pregnancy to term and give birth to the rapist's child? What are the consequences for her and

for the child? Who pays for the child's care if she abandons it because she is so horrified by her experience?

What about the terrified young adolescent woman who conceals her pregnancy until it is too late and finally delivers a baby that she does not want and places it, dead or alive, in a dumpster? Should she have been able to terminate the pregnancy when she discovered that she was pregnant, or should she have been forced to continue the unwanted pregnancy to term? In days past, there was no choice, but now there is.

These are some of the kinds of ethical dilemmas that occur in late abortion practice.

Limited availability of late abortion services

In March, 1988, five shots were fired through the front windows of my office, narrowly missing a member of my staff, and I had just walked through the space. This occurred soon after the publication of my textbook, ***Abortion Practice***, and other publications of mine in which I described the techniques and instruments for the performance of late abortions.[22] The national networks of anti-abortion fanatics who were violently opposed to these services focused on me as well as some other physicians. The 1988 shooting was a clear sign of disapproval.

The availability of late abortion services by any means has increasingly diminished during the past 30 years due to legal restrictions, anti-abortion violence directed toward physicians and clinics offering late abortion services, and a declining willingness among physicians to be at risk of assassination. Dr. David Gunn was assassinated in 1993, Dr. John Brittain was assassinated in 1994, the physician who owned the clinic where both of these physicians worked was assassinated in 1994, and Dr. Bernard Slepian was fatally shot through his kitchen window in October, 1998 by a well-known anti-abortion fanatic. On May 31, 2009, Dr. George Tiller was assassinated in his Lutheran church lobby in Wichita, Kansas by an anti-abortion fanatic who had stalked him for years for this purpose.[23,24] Dr. Tiller was one of two physicians in the United States at that time (the other one being this author) who offered late abortion services on an outpatient basis. Dr. Tiller was shot in both arms in 1994 by Shelley Shannon, who wrote to me from Kansas State prison later, telling me, "you're next." Beginning with Dr. Gunn's murder in 1993, these five physicians specializing in abortion services have been assassinated in the United States along with increasing attacks on physicians who perform late abortions. Other clinic workers and an off-duty policeman have been assassinated, and several other clinic workers have been grievously injured with life-threatening wounds. 24-hour protection of physicians, patients, and all others who work in and around abortion clinics and private physicians' offices have become constant major concerns.

On January 22, 1995, the "American Coalition of Life [sic] Activists" held a national press conference to announce the names of the first thirteen physicians they wanted assassinated for performing abortions. I was on this list, and so was Dr. Tiller. The group also posted a web site with the names and detailed personal information of dozens of physicians known for performing

abortions with lines drawn through the names of those who had been assassinated. These actions were clearly designed to identify targets for potential anti-abortion assassins. The group was successfully sued in federal court by a group of plaintiffs, including the author, who were threatened by this incitement of anti-abortion violence.

Political attacks on abortion services in the U.S. have steadily increased since 1974, and as of this writing, more than half of all states have enacted laws restricting the performance of abortion after 19 weeks or later.[25] Women and couples in these states being suddenly faced with the unexpected diagnosis of fetal abnormality and choosing to terminate the pregnancy must now find a physician who is willing to perform an abortion late in pregnancy and is capable of doing so. Since many public and community hospitals have been taken over by religious sects that do not permit abortion, choices are limited to a few private physicians operating in private clinics prepared to perform these procedures.

In addition to these problems, few physicians are willing to perform late abortion, even if they have experience and training in this area of medicine. Performing abortions, particularly late in pregnancy, is the lowest status activity in medicine. It is highly stigmatized in the medical community, particularly among young women obstetrician/gynecologists, who actively work to destroy the careers and professional standing of physician who perform late abortions. Physicians with training in obstetrics and gynecology have many high-status and more financially rewarding as well as professionally interesting opportunities that are far more attractive than that of performing late abortions, which has the added undesirability of being dangerous because of the constant risk of assassination by anti-abortion fanatics. The altruistic appeal of helping desperate women suffers in the context of these other factors, and so does the altruistic appeal of death and martyrdom for a good cause. Life is short, and performing abortions, especially late abortions, has proven to be an excellent way of making it shorter for physicians who do that work.

Outpatient termination for fetal disorder in a specialized private facility offers many advantages over hospital care. In a specialized clinic such as mine, medical care is completely oriented toward assisting and supporting women who have decided to terminate a pregnancy and to giving each woman and her family individual attention. All clinic personnel have a positive attitude toward the patients who have made this decision including those with desired but complicated pregnancies. Staff members are employed specifically because of supportive attitudes in addition to professional competence. Patients having questions, complaints or complications who call after discharge speak with the same physician and staff members who took care of them at the clinic. Continuity of care is a basic principle. Disadvantages of outpatient care consist primarily of increasingly heightened security concerns, needs and costs due to anti-abortion harassment and violence directed toward patients, staff, the physician, and support personnel. Response to these issues includes the provision of secure private transportation to and from the clinic for patients staying at local hotels, especially during anti-abortion demonstrations.

Except for some university hospitals with abortion training programs that will see patients up to 24 weeks gestation, choices of hospital access for abortion patients after 16 weeks' gestation and for physicians are increasingly restricted by the acquisition of private hospitals by sectarian agencies that are officially opposed to abortion and by aggressive legislative restriction of access to abortion in various states. For women seeking termination of an advanced pregnancy for reasons of a fetal abnormality, this means that there are fewer choices for individual care among a diminishingly small number of experienced private physicians specializing in this service.

Conclusion

Women seeking late abortion at an advanced stage of pregnancy are frequently among the most desperate because of severe medical complications of the pregnancy, intercurrent medical conditions that threaten the patient's life immediately, severe social and mental health problems such as a history of rape, incest, intimate partner violence, extreme poverty, and complex combinations of these various problems. Some or all these factors have contributed to the delay in seeking an abortion.

Their choices and chances for medical treatment that could save their lives is increasingly limited by widespread sectarian hospital prohibition of abortion, repressive anti-abortion legislation throughout the United States and in many other countries, especially limiting abortion after 20 weeks of pregnancy, and lack of interest among physicians and other health care practitioners in performing late abortions.

Performing late abortions exposes the physician to constant legal, political, and legislative attacks, extremely negative public scrutiny, ostracism in the medical community, interminable threats of violence, and the daily threat of assassination by anti-abortion fanatics. The costs of security are astronomical.

The consequences for women and their families of not being able to terminate a pregnancy because of late diagnosis of fetal anomalies or late diagnosis of the pregnancy itself are often catastrophic including prolonged suffering for severely impaired infants born alive and insupportable costs of palliative medical care over periods of decades. Safe, supportive, and humane medical care for women seeking late termination of pregnancy is available, but few physicians are willing to offer this service, and few women have access to it for the reasons stated above.

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