Abortion [1]

By: Raup, Christina


Abortion is the removal of the embryo or fetus [5] from the womb [6], before birth can occur—either naturally or by induced labor. Prenatal development occurs in three stages: the zygote [7], or fertilized egg [8]; the embryo, from post-conception [9] to eight weeks; and the fetus [5], from eight weeks after conception [9] until the baby is born. After abortion [10], the infant does not and cannot live. Spontaneous abortion [10] is the loss of the infant naturally or accidentally, without the will of the mother. It is more commonly referred to as miscarriage [11]. Induced abortion [10] is the deliberate removal of a developing infant to end a pregnancy [12].

Induced abortion [10], known hereafter as simply abortion [10], has been practiced since before written history. Various ancient methods relied upon a number of different herbs to induce menstruation [13] and expel the fetus [5]. Soranus [14], a child-bearing expert of the second century BC, recommended exercises such as horseback riding and carrying heavy loads, which would make a woman more likely to miscarry. If the pregnancy [12] was not terminated after one treatment, others would be recommended. Today, in countries where abortion [10] is legalized, there are several simple and standard medical procedures which end the pregnancy [12] without extensive regimens.

Abortion was not illegal in the US until the 1880s, when a number of states passed stringent anti-abortion [10] laws. These laws are often linked to the Comstock Laws of 1873, which made it illegal to distribute materials used for contraception [15] or for abortion [10]. Abortion remained illegal until the controversial but landmark Supreme Court case Roe v. Wade [16] of 1973. This case legalized abortion [10] under the premise that the decision to have an abortion [10] was a protected right to privacy between a woman and her doctor. It also extended the circumstances in which abortion [10] is permissible. However the Roe v. Wade [16] case gave the government continued permission to restrict or preclude abortion [10] in certain situations.

Several techniques existed for performing an abortion [10] at the time of Roe v. Wade [16]. The dilation and curettage method, or the D&C, has been practiced since even before abortion [10] was legalized in the US, and is now called the D&E, or dilation and evacuation [17]. At one time a physician gradually enlarged the woman’s cervix [18] by inserting a series of increasingly thicker rods, but now the cervix [18] is dilated by administering medication. The physician then gently scrapes out the contents of the uterus [19] using a spoon-like instrument called a curette. If performed early enough in the pregnancy [12], the woman is said to suffer little to no discomfort, but if performed later the procedure can result in menstrual-like cramps. The suction method is a similar procedure, and uses what is called a suction curette. The curette has an opening at the end attached to a drainage tube that leads to a collecting container. The device works by vacuum pump and enables physicians to remove only the fertilized ovum [20] and placenta [21], eliminating the possibility of pushing through the wall of the uterus—a risk of the D&C. It also results in less tissue being removed from the uterine wall, making it a safer procedure with less chance of affecting the woman’s future ability to conceive.

After the fourteenth week of pregnancy [12], scraping methods can no longer be used; instead the uterus [19] must be induced to expel the fetus [5], resulting in premature labor [22]. In the saltwater method, formerly used for this purpose, a needle is inserted through the abdominal and uterine walls and into the amniotic sac [23], the fluid-filled sac that supports the embryo in the womb [6]. A portion of this amniotic fluid is removed; a saline solution is then injected between the uterine wall and the amnion [24], forcing their separation. After a day or so, contractions begin. The woman goes through labor and delivery to expel the fetus [5]. This method can also be termed salt-poisoning, because the actual mechanism of death is theorized to be acute hypernatremia, or acute salt poisoning. It may be that the death of the fetus [5] is due to the high concentrations of salt injected into the womb [6], instead of the forced separation of the amnion [24] from the uterus [19].

Today a woman can obtain a medication abortion [10] or an in-clinic abortion [10]. If a woman chooses to have an abortion [10] at the clinic, a physician performs a D&E. The medication abortion [10] can be administered up to sixty-three days (nine weeks) after a woman’s last period. At her first visit to the clinic, the woman is given the drug mifepristone, which blocks the hormone [25] progesterone [26], causing the lining of the uterus [19] to break down. Up to three days later, a second drug known as misoprostol is administered. Misoprostol causes cramping and bleeding as the contents of the uterus [19] are expelled. Bleeding or spotting can last up to four weeks after a medication abortion [10]. Follow-up appointments occur two weeks after the misoprostol is given to ensure that the pregnancy [12] is terminated and that the woman is healthy.

Under the administration of George W. Bush [27] as US President, a federal ban was placed on late-term abortions. The Partial-
Birth Abortion Ban Act of 2003 made it illegal to perform or obtain partial-birth abortions, or intact D&E. A partial-birth abortion involves partially extracting the fetus, until only the head remains in the uterus. The physician then punctures the skull, collapsing the fetal head. This is typically followed by suctioning out the contents of the fetal head, which results in the death of the fetus, and allows for an easier extraction through the cervix. This procedure was typically used after the second trimester of pregnancy, when other techniques could no longer be used. Congress passed bills banning partial-birth abortion twice during the Clinton Administration, but the president vetoed both bills. After the 2003 ban was signed by George W. Bush, several noteworthy cases went before the Supreme Court challenging the legality of the ban, but each time the court has narrowly (often 5-4) voted that the ban is constitutional.

There is a great amount of controversy over abortion in the US and elsewhere. Those who oppose abortion, known as pro-life or right-to-life advocates in the US, contend that life begins at conception, and that to deliberately end a pregnancy is murder and violates the rights of the unborn. Advocates for abortion have several different arguments. Some claim that abortion was banned as an attempt to control women’s reproductive rights, or that women ultimately have the right to make decisions about their own health, their bodies, and whether or not they wish to carry a pregnancy to term. Others base their opinions on the fact that abortions will occur whether or not it is legal; by legalizing abortion, the practices can be regulated and performed by knowledgeable, trained professionals, instead of by untrained practitioners—or even the women themselves.

Sources


Abortion is the removal of the embryo or fetus from the womb, before birth can occur—either naturally or by induced labor. Prenatal development occurs in three stages: the zygote, or fertilized egg; the embryo, from post-conception to eight weeks; and the fetus, from eight weeks after conception until the baby is born. After abortion, the infant does not and cannot live. Spontaneous abortion is the loss of the infant naturally or accidentally, without the will of the mother. It is more commonly referred to as miscarriage. Induced abortion is the deliberate removal of a developing infant to end a pregnancy.

Subject
Abortion

Topic
Processes, Ethics, Reproduction

Publisher
Arizona State University. School of Life Sciences. Center for Biology and Society. Embryo Project Encyclopedia.

Rights
© Arizona Board of Regents Licensed as Creative Commons Attribution-NonCommercial-Share Alike 3.0 Unported (CC BY-NC-SA 3.0) http://creativecommons.org/licenses/by-nc-sa/3.0/