Artificial Insemination

by Vern L. Bullough

Artificial insemination, sometimes known as “alternative insemination” or “donor insemination,” is a procedure by which semen is injected into the uterus for the purpose of impregnation. Although it is used primarily to impregnate married women whose husbands suffer from infertility, it is also often used by lesbians and heterosexual single women who wish to conceive without sexual contact with males. It is also frequently the method of choice when gay men create families through surrogacy or through co-parenting.

History

Although Arabs used artificial insemination in horse breeding as early as the fourteenth century, and Lazzaro Spallanzani transferred male dog semen into a rutting female in 1780, it was the British surgeon John Hunter who carried out the first successful experiment on humans at about the same time. He advised a patient whose severe hypospadia (a condition in which the urethra does not come out of the end of the penis) made it impossible to ejaculate in his wife's vagina to collect his semen and inject it into his wife with a syringe. He did, and she became pregnant.

Hunter's patient was incredibly lucky since other researchers failed to replicate his success if only because such an injection had to coincide with ovulation, about which he and others knew nothing. Marion Sims (1813-1883), the founding father of experiments on artificial insemination in humans, had only one successful case out of 55 attempts, and the woman later spontaneously aborted. Sims attributed many of his failures to faulty technique but it was more a matter of poor timing.

It was much easier to inseminate animals where rutting occurs, and the Russian physiologist Ilya Ivanovich Ivanov, in the first part of the twentieth century, demonstrated that the sole necessary condition for impregnation of most domestic animals and poultry was the union of the sperm with the egg. By 1940 artificial insemination was being used widely in dairy herds in the United States and spread rapidly to other mammals.

It was not until the reproductive cycle of the human female was fully understood that artificial insemination in humans could be little more than playing Russian roulette. In 1936, C. G. Hartman finally described the 28 day menstrual cycle and calculated the most fertile period for women, 11 to 14 days after the first day of the menstrual flow.

Hartman's results were seized upon by Natural Family Planning advocates to calculate the safe period (when pregnancy was least likely to occur) and by fertility advocates to determine when the woman would be most susceptible to pregnancy.

By 1941 over ten thousand women had become pregnant through artificial insemination, and by 1955 the number had reached fifty thousand. By the 1970s, the methods for calculating fertile periods had become so efficient that many women, including a significant number of lesbians who wanted to have a baby but did not want to have intercourse with a male, could use turkey basters or other long syringe-type
instrument to inject semen donated by a willing male, sometimes known to them, other times not.

Heterosexual couples also turned to artificial insemination when the woman seemed unable to get pregnant. In such cases, the husband often initially furnished the semen unless he was found sterile, and then they turned to the use of anonymous donors, often individuals selected by a cooperating physician.

Since semen could be frozen and preserved, banks of semen by anonymous donors soon developed. Technically they were anonymous, but their medical and genetic records could be made available to the would-be mother.

Legal opinion lagged behind reality, and in many cases women who became pregnant through artificial insemination not furnished by their husbands could be and often were charged with adultery.

Religious opposition to donor insemination rose early in the process, but gradually diminished as the twentieth century progressed. Most religious groups now accept the process, although often with reservations and restrictions.

Gradually, the process has been extended legal protection. Artificial insemination has been legalized in most areas, though many jurisdictions limit artificial insemination to married couples or specifically deny lesbians access to sperm banks.

**Glbtq Issues**

While many sperm banks and fertility specialists offer their services to lesbians, others do not, and several countries, including Germany, restrict access to sperm banks to married couples. However, because the procedure is relatively simple, donor insemination is frequently available to lesbians even in places where there are legal hurdles.

When used by lesbians and gay men, artificial insemination carries a number of legal and emotional considerations and risks. Perhaps the most important of these is the role of the parties in the rearing of a child.

A sperm donor may be classified as a donor or as a father. The former is generally anonymous and relinquishes all parental claims and responsibilities, while the latter is known to the mother and assumes parental responsibilities. Similarly, a surrogate mother, impregnated through artificial insemination, may or may not wish to be involved legally or emotionally in the rearing of the child to whom she gives birth.

While most donors recruited by sperm banks are anonymous and legally relinquish parental rights and responsibilities, a few sperm banks allow children, with the consent of the donor, to initiate contact with their genetic father at a specified age.

When the sperm donor is known—as in cases where individuals such as a gay man and a lesbian (or a gay male couple and a lesbian couple)—decide to co-parent a child, it is very important that all parties be clear as to the legal obligations and consequences of the co-parenting arrangement. Since alternative families are not acknowledged in most jurisdictions, co-parenting may carry with it considerable legal risks.

Other issues involved in artificial insemination include health considerations, such as access to the donor’s medical history and genetic heritage, and the emotional impact on the children of artificial insemination of not knowing their fathers or growing up in non-traditional families.

**Bibliography**

About the Author

**Vern L. Bullough**, a SUNY Distinguished Professor Emeritus, also founded the Center for Sex Research at California State University, Northridge. He was the author, co-author, or editor of more than 50 books, about half of which deal with sex and gender issues. A past president of the Society for the Scientific Study of Sexuality, he earned numerous awards for his writing and research, including the Kinsey award. He wrote more than 150 refereed articles, and hundreds of others. During his career, he lectured in most of the 50 states, and in more than 25 foreign countries.