

REPRODUCTION- LO3 ACTIVITIES

1. ARTIFICIAL INSEMINATION

In artificial insemination, semen containing sufficient number and good quality sperm are transferred into the woman's vagina by a doctor. This is done around the time the woman is due to ovulate. Why? The sperm can come from the woman's husband, or from another man (a donor).

ACTIVITY

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There are many moral, social and legal issues that are associated with artificial insemination. Write down your opinion concerning each of the following questions:-

- Who do you think is the legal father of the child? Is it the husband or the donor?
- When and how should a child, born out of artificial insemination, be told that his / her father is not his / her biological father or should he / she be told at all?
- Could the child be an heir to the donor's wealth if the donor is a rich man?
- Samples of semen can be kept frozen in liquid nitrogen for many years and still be viable
 - How long should the sperm be kept?
 - Should it be used when the donor is
 - Who decides when the sperm should be used?
- Should a couple resort to modern technology to have a baby? Are we NOT interfering with God's plan for us? Substantiate.

2. FERTILITY DRUGS

Some women do not easily ovulate and therefore, do not produce ova. Gynaecologists treat these women by giving them fertility drugs that contain FSH and LH to stimulate their ovaries to produce ova. These fertility drugs frequently cause many ova to be released simultaneously. Fertilisation of these many ova can result in multiple births three, four or more babies at once. The more babies that are born from multiple births, the smaller are the babies and the lower the survival rate after birth.

3. 'IN-VITRO FERTILISATION'

Most women with blocked Fallopian tubes can produce ova and can undergo implantation and gestation normally. However, these women need medical help in getting the ovum from the ovary to the uterus. Also in women with blocked Fallopian tubes, sperms cannot meet and fertilise the ovum high up in the Fallopian tubes where fertilisation normally occurs. The solution to the medical problem is to remove ova from the ovary, fertilise the ova with sperm in sterile laboratory glassware (not a "test tube"), and then place the embryos in the woman's uterus, where it may develop normally.

The first baby born using in-vitro fertilisation was in 1978 in Britain. The first so-called "test tube baby", Louise Brown, was born amid intense controversy over the safety and morality of the procedure. Since then, many thousands of babies have been successfully born using in-vitro fertilisation.

The following is generally the procedure employed by fertility experts:-

The woman is given fertility drugs (containing FSH and LH) which cause her ovaries to release many mature ova simultaneously.

These eggs are collected laparoscopically i.e. they are sucked from the ovaries up in a fine tube inserted through the abdominal wall.

The ova are then mixed with sperms (generally from the husband) in a petri dish. This petri dish contains fluid with salts and nutrients so that it is osmotically balanced with the ovum. The petri dish is kept at around 37° C and at the correct pH.

The ova are then observed under a microscope to see if cell division takes place. If cell division (mitosis) does take place, it means that fertilisation and zygote formation took place previously.

After about three days, one or more of the dividing zygotes (now called embryos) are inserted into the woman's uterus using a tube inserted through the cervix.

Usually one of the embryos becomes implanted and develops into a baby. Sometimes more become implanted, resulting occasionally in multiple births.

The success rate for in-vitro fertilization is about 20-30%.

PAIRED/INDIVIDUAL ACTIVITY ON IN-VITRO FERTILISATION

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Read the account on in-vitro fertilisation above and answer the questions that follow:-

- Suggest why the fertility expert would want many ova to develop in the woman's ovaries.
- Why do you think the ova are collected before they are released from the ovaries?
- At what stage of a woman's menstrual cycle should the ova be collected?
- Why are the petri dish and nutrients kept at 37° C and at the correct pH?
- Suggest why the embryos are put into the uterus after three days, and not before.
- In your opinion, is the term "test tube baby" appropriate? Substantiate.
- If there be "spare" embryos during in-vitro fertilisation, should they be destroyed, used for research or given to childless couples? Substantiate.

- In your opinion, when does the life of a person begin? (Is it at fertilisation, embryo stage, foetal stage or when the baby is born?) Give reasons for your answer.
- If law courts decide that life begins when a zygote is formed, should the fertility expert be charged with "murder" for destroying the "spare" embryos? Substantiate.
- The Roman Catholic Church is opposed to in-vitro fertilization and advocates that infertility is a call from God to adopt children. Some estimates of the number of discarded embryos "killed" reach six million and the Catholic faith sees this as murder. Find out, if you are NOT a Roman Catholic, what your religion believes about in-vitro fertilisation.
- Would you seriously consider in-vitro fertilisation if you and your spouse are a childless couple? Give reasons for your decision.

SURROGATE MOTHERHOOD AND IN-VITRO FERTILISATION

An egg fertilised by in-vitro fertilisation may be implanted in the uterus of a woman who is NOT the mother of the child. This woman is called a SURROGATE mother who "lends" her uterus for the period of gestation.

The first case of surrogate motherhood in South Africa occurred in 1987 in Tzaneen in Limpopo Province. Pat Anthony, a 48-year old grandmother was implanted with ova produced by her daughter and fertilised in-vitro by her son-in-law's sperm. Pat Anthony, is thought to be the first woman in the world to bear her own grandchildren, had agreed to be implanted with four embryos for her daughter, Karren Ferreira-Jorge. Karren was twenty five years old and unable to bear any more children because her uterus was removed following the birth of her only child, three years previously. Pat Anthony gave birth to three grandchildren. The triplets, two boys and a girl were delivered by Caesarean section.

The above case sparked an intense debate in medical, legal and religious circles about the complex ethical, moral and legal issues surrounding surrogacy. Under South African law, it was not clear who the legal mother of the triplets were was it Pat Anthony or her daughter Karren. Most legal experts believe that as long as surrogacy was not undertaken for financial gain, there should be no legal problems.

The Roman Catholic Church disapproves of surrogate pregnancy because it believes that any conception other than that resulting from natural sex acts between married couples was "morally illicit". The medical profession in South Africa is generally opposed to surrogate motherhood, citing ethical grounds. At the time, in 1987, the South African Justice Minister said that the children belonged to Pat Anthony until they were legally adopted by the Ferreira-Jorges.

INDIVIDUAL ACTIVITY "RENTAWOMB"

LO3 AS3

Many childless Indian couples living in Canada, Britain, Australia and the United States are buying the services of professional surrogates from rural India. Smita Pandya, a housewife, is expecting her third child. Unlike the other two, she is being paid to carry this one. She is renting her womb so that she can give her own children a better future. The commercial surrogates get paid between R15 000 R30 000 for their services.

Another woman stated that only her husband knew about her being paid to carry somebody else's baby. She felt that she was doing a noble thing as it would bring happiness into another couple's life.

The in-vitro fertilisation technique involves the egg of the biological mother being fertilised with sperms of the father in a laboratory. The embryo is then transferred into the uterus of the surrogate mother. The women deciding to become surrogate mothers are briefed right from the start that they will have to hand over the child to the childless couple soon after the delivery and are repeatedly told this whenever they are examined during pregnancy. They are also asked not to develop any attachment for the child after the birth.

Another lucrative source of income for the women in India is egg donations. One woman who donated her eggs for about R750 said that she made this money in twenty days and that this was a way of earning money quickly without doing anything 'immoral'. While wombs for rent in India may be legal, in Canada and most other parts of the world, it is illegal. In Canada, the Assisted Human Reproduction Act states that no payment can be made to a sperm or egg donor for their donation nor can payment be given to a woman providing surrogacy services.

(Adapted from the website <http://www.asianpacificpost.com/portal2>)

QUESTION

- What is surrogate motherhood?
- What is meant by commercial surrogacy?
- Suppose you are the Minister of Welfare, formulate two laws you would put in place to protect the rights of children born through surrogate motherhood.
- State any two circumstances that would compel couples to use surrogate mothers.
- How do you feel about the "Rent a Womb" concept? Write an essay of about one page to Explain your views.

INDIVIDUAL ACTIVITY ON ABORTION LO3 AS3

Study the letter to the editor and the two advertisements concerning abortion.

LETTER TO THE EDITOR AGAINST ABORTION

FOETUS IS ABABY

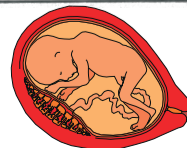
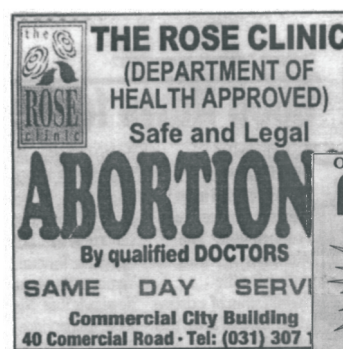
The biggest lie of the abortion industry's propaganda machine, is that the unborn child is a worthless, disposable blob of tissue.

The second lie is that it is acceptable to ruthlessly terminate this life simply because it will be an inconvenience. More than 85 000 babies were aborted in South Africa last year, bringing the total number of aborted since the legalisation of abortion on demand to more than half a million since 1997. These statistics indicate that abortion on demand is being used as a heartless form of birth control.

No wonder that baby / child abuse and murders have increased. The only difference between abortion and murder victims is that one has been born while the other is supposedly in the safety of the mother's womb. Abortion, with its devaluing of human life, breeds a society that is heartless, especially towards its most vulnerable citizens.

ELEANOR POULTNER, Sherwood

(Daily News, 7 June 2006)



QUESTION

Write a response on the above three source materials to the editor of your local newspaper. You need to take sides i.e. be a pro-abortionist or an anti-abortionist. The two best responses (one pro-abortionist and one anti-abortionist viewpoint) should be sent to your local newspaper.