



# Human Health & Physiology

*In vitro* fertilization (IVF)

# *In vitro* fertilization

- “Test tube baby”
- Ovary is treated with hormones (FSH) to stimulate development of many follicles
- Mature eggs are retrieved and mixed with sperm in a petri dish
- After 2 days, 2 or 3 fertilized embryos are transferred into the uterus
- Chances of success = 25%

# *In vitro* fertilization

## **Pros**

- Infertile couples (or couples with fertility issues) are able to have children
- Possibility of pre-screening embryos for genetic disease before implantation

# *In vitro* fertilization

## **Cons**

- High risk of multiple births
- Not all embryos are implanted
  - May be destroyed
- Expensive

# Costs associated with IVF

- Consult = \$0-200
- IVF = \$4300-5500
- Embryo freezing (1<sup>st</sup> year) = \$480-650
- Annual embryo storage = \$150-300
- Frozen embryo transfer = \$540-1100

# Costs associated with IVF

- In Ontario, OHIP covers IVF costs only in cases where both fallopian tubes are naturally blocked
- The rest is paid out of pocket
- In Quebec, 3 rounds of IVF are covered
- Each round will see 3 embryos implanted

# Ethical Issues

- Taxes paid on IVF – not a quality of life issue
- Should we cover IVF?
- Is the ability to have children a basic human right?
- Should tax payers pay for the procedure?
- Why only tubal blockages receive coverage? What about men? Is this discrimination?

# Ethical Issues

- What about the potential for “designer” babies?
- Greater likelihood of premature births and multiple births = greater stress on our healthcare system
- Amoral for some religions

# Ethical Issues

## ***Catholicism***

- [www.catholicnewsagency.com/column.php?n=1186](http://www.catholicnewsagency.com/column.php?n=1186)
  1. Children should be born within marriage
  2. You shouldn't separate sexual intercourse from conception
  3. Some inherent health risks
- Should have faith in God to choose

# Ethical Issues

## *Islam*

- <http://islamqa.info/en/ref/98604/ivf>
  1. Faith in Allah to decide whether you should have children or not
    - a) Permissible under certain conditions
  2. Modesty issues with male doctors
  3. Men not allowed to masturbate
  4. Sanctity of marriage

# Ethical Issues

## ***Hinduism***

- Acceptable provided that egg and sperm are from a married couple

# Ethical Issues

- **Viewpoints from other religions/creeds/beliefs?**