

In vitro Fertilization: The status of the frozen embryo

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- The first Kenyan IVF babies were born on 8th May 2006
- The event was celebrated as a breakthrough
- It was to offer hope for perhaps thousands of Kenyan couples who were childless
- Since then a number of IVF clinics have sprang up around the country
- Childless couples are routinely offered IVF as a solution to their childless state

- Little is said about the state of the frozen embryo
- Or the ethics and morality of the IVF treatment
- The number of frozen embryos in Kenya is unknown
- There are between 400,000 and 500,000 frozen embryos in the USA alone
- With an estimated 20,000 being added annually

The IVF process

The woman's ovaries are hyper-stimulated using fertility drugs that produce numerous eggs



Using ultra sound a thin needle is inserted through the vagina into the ovary and eggs are aspirated out



The sperm and the eggs are mixed (insemination) or the sperm is injected into the egg (intra-cytoplasmic Sperm injection)



A blood test is conducted after two weeks to determine if the woman is pregnant



Between 1-4 of the best embryos are implanted into the uterus using a catheter



Embryos are incubated a special chamber for up to 72 hrs to verify they are dividing well



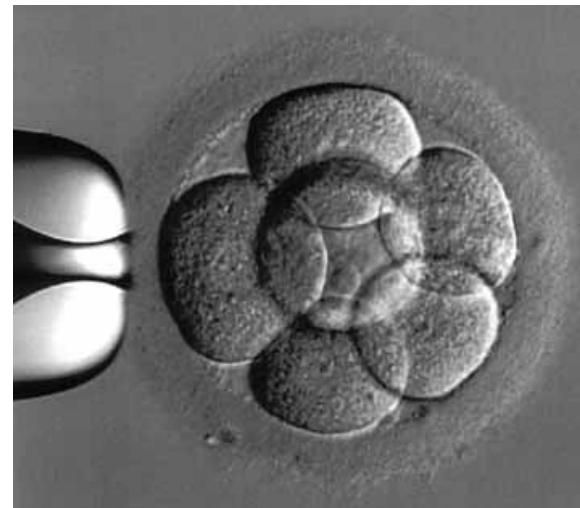
Fertilization



Embryo's dividing



8 day old embryo



**Pre implantation
diagnosis testing**

- Pre-implantation genetic tests are conducted before implantation
- Any "defective" embryos are destroyed
- The European Court of Human Rights in August 2012 ruled that PGD must be allowed for parents who wish to screen their embryos
- Other unfertilized embryos are frozen

- If there was no successful pregnancy another 4 embryos are thawed and implanted after PGD
- After a successful pregnancy the other remaining embryos are frozen indefinitely in what Dr. Jerome Lejeune a renowned geneticist called "concentration cans"
- In the event that more than one embryo implants parents select the embryos they want and the unwanted embryos are aborted

- Parents are encouraged to carry the fewest and the healthiest embryos
- Some embryos are destroyed on account of their sex
- Others are destroyed because they have treatable defects such as cleft palate
- Or because they carry genes for breast or colon cancer which would develop decades later

- They presume that it is better never to have lived than to develop cancer in their mid life
- However carrying a gene for a disease does not guarantee development for the disease
- Other factors like diet, environment and lifestyle contribute to disease development
- Are the embryos human?
- When does life begin?

- Life begins at conception (The Kenyan Constitution Section 26 (2))
- The Embryo is a being...integral whole with actual existence. The being is human. It will not articulate itself into some other kind of animal. If it is objected that at five or fifteen days the embryo does not look like a human being, it must be pointed out that this is precisely what a human being looks like-and what each of us looked like-at five or fifteen days of development"

The 1995 Ramsey Colloquium on Embryo Research

- *Donum Vitae* (1988) and *Donum Personae* (2008) explain that IVF results in procreation outside the marital act
- IVF denies the child a fully human origin
- Children come into being through a lab procedure
- All children have the right to be conceived through the marital act of the parents

Do parents have a right to a child?

- Our African culture views children as gifts
- IVF makes children possessions
- Parents have a right to the best product
- Parents may be willing to love and nurture their child
- But this is only partial because they reject and abort their other children

The fate of the frozen embryo

- Indefinite freezing- costs are prohibitive
- Embryo research-possible in the USA after 2009
- Embryo can be donated to other couples
- Snowflake Baby program

Consequences of IVF

- The death of many embryos at every stage
- More multiple births than before
- More genetic defects in children than before
- A multi billion industry dealing with the trade of humans

Conclusion

- IVF justifies selective and eugenic abortion
- And the eugenic screening of embryos
- What is the fate of the frozen embryos in Kenya?
- What happens to "excess" embryos?
- What should be done to unwanted and unclaimed embryos?

Conclusion

- We cannot justify the continued production of human embryos (John Paul II)
- This needs to be halted immediately
- There appears to be no immediate moral solution to the destiny of thousands of frozen embryos

Conclusion

- Some ethicists propose only a few eggs to be fertilized at a time and all these to be implanted so that there are no spare embryos
- No matter how carefully IVF is done it will still lead to the death of many children
- The only solution would be to halt all IVF procedures completely

If we believe that all human life should be treated with dignity and respect then we should allow all the frozen embryos to die a dignified death and not procreate any more embryos

Thank you