

# Teaching bioethics

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# Why bioethics?

Advances in biosciences ethically controversial.  
Easier to find technical solutions than answers to ethical questions.

Freedom of science versus social control of the use of the results.

Discussion is needed both on a general level and on application level.

Need of information about both the science and the ethics.

# Controversial issues

- Beginning and end of life
- IVF, PND and PGD
- Stem cell research
- Human cloning (therapeutic and reproductive)
- Organ transplantation
- Genetic information, biobanks
- GM-food and developing countries
- Animal experimentation

# Teaching bioethics - When?

Early or late?

Separated or integrated?

The traditional method:

First the theory, then the case.

The case based approach:

First the case, then the theory!

# How?

- Thought experiments
- Narratives
- Sociodrama
- Problem based learning
- Role play
- Argumentation exercise

# Choice of case

- Of current interest
- Authentic but anonymous
- Suitable for the age group
- Ethically provocative

# The exercise

- Present the case by describing the facts and the problem to be solved
- Give alternative solutions
- Encourage participants to engage in argumentation and communication
- Respect for others' views
- Consensus not the goal
- Evaluation

# Ethical principles

- Beneficence and non-maleficence
- Respect for human dignity
- Justice and equity
- Autonomy and freedom of choice
- Solidarity
- Precaution and responsibility
- Right to privacy and ownership

# The problem

A couple has a child with a severe genetic disease, which means that the child will need one or perhaps repeated blood stem cell or bone marrow transplants to survive.

To achieve a good transplant a genetically similar donor is necessary.

The ideal would be a sibling with similar gene specificities in the so called HLA- system, important for the immune reactivity.

Using a combination of in vitro fertilization and pre-implantation diagnostic testing it would be possible to get a sibling free of the inherited disease but with HLA-identity.

# The solution

One possibility is that blood stem cells from the cord of the newborn could be successfully used as transplant. This involves very little discomfort for the donor child.

But in case of failure bone marrow transplant will be necessary. It may cause pain and discomfort for the donor child.

If you were the obstetrician and the parents asked you to help them would you:

- A: Support the couple and help them as soon as possible.
- B: Tell them that you could not help since you have strong ethical concerns.
- C: Tell them that this is a very sensitive problem which in the future may cause ethical and psychological concerns in the family and therefore you advice the parents to discuss the issue further with each other and together with the hospital social worker and return in one month time.
- D: Other alternative(s).

# Web resources

[www.ncbi.org](http://www.ncbi.org)

[www.bioethics-today.org](http://www.bioethics-today.org)

[www.nuffieldbioethics.org](http://www.nuffieldbioethics.org)

[www.eureth.net](http://www.eureth.net)

[www.unesco.org/bioethics](http://www.unesco.org/bioethics)

[http://europa.eu.int/comm/european\\_group  
ethics/secret\\_en.htm](http://europa.eu.int/comm/european_group_ethics/secret_en.htm)