



the social science stem cell initiative



Researching the Collection and Use of Fetal Stem Cells

This research project is finding out what different people think about the collection and use of aborted fetuses in stem cell research. It investigates

- where and how scientists obtain aborted fetuses;
- where and how they are used in stem cell research and the development of therapies,
- public and commercial involvement in fetal stem cell research and therapies,
- risks and benefits of using fetal stem cells in therapies
- ethical concerns relating to the use of fetal stem cells,
- regulatory policy relating to abortion in the UK,
- how fetal stem cell research and therapies are regulated in the UK.

Methods

- Participant observation at a large number of scientific and policy meetings;
- Interviews with stem cell scientists, policy makers, clinicians, tissue bankers, sponsors and activists
- Focus groups with women who have had, and have not had experience of pregnancy termination;
- Content analysis of law and policy documents.

Preliminary findings

Emerging from the research are a number of key themes and findings relating to the collection and use of fetal stem cells. These include:

Collection of fetal tissue in the abortion clinic

- There are important differences between the collection and use of pre-implantation embryos and aborted fetal tissue.
- The tissue may be collected following either a surgical or medical abortion. It may be collected at different stages of development.
- Some fetal tissue is frozen and stored for future use.
- The transformation of an unwanted birth/pregnancy into a source of stem cells configures women and fetuses in ways that have so far been unexplored.
- Practices relating to the collection of fetal tissue in the abortion clinic vary across sites according to local arrangements, the availability of tissues, the needs of research teams.
- Consent procedures for the collection of tissue vary and treat women in a variety of ways, as 'vulnerable', in need of protection, as 'doing good', and as 'donors'. The information given to women about the use of fetuses in research is extremely varied.

- Aborted fetuses are a source of a range of stem cells and cell types and the meanings of 'fetal stem cell', 'adult stem cell' and 'embryonic stem cell' are contested.
- Researchers may collect the undeveloped 'germ cells' from the fetus – the cells that could have become eggs or sperm. They may collect cells from the developing tissues in the fetus.

Regulating fetal tissue in stem cell research

- In law, fetal tissue is the woman's tissue and may be disposed of as clinical waste but the aborted fetus is also regarded as a corpse and may be buried or cremated.
- The regulation of the collection and use of fetal tissue in stem cell research lacks transparency, oversight or accountability. Little is known about the use of fetal stem cells outside the scientific community and there is confusion surrounding regulatory requirements.
- Different arrangements currently govern the collection and use in research of pre-implantation embryos and aborted fetuses. However, embryos and fetuses are being drawn into the same regulatory space.
- While the focus of attention for activists has been the use of pre-implantation embryos in SC research there is currently little activism around the use of aborted fetuses in research.

Uses of fetal stem cells

- Researchers use fetal stem cells in a number of different ways. Stem cell researchers using these cells are investigating a variety of diseases including diabetes, Parkinson's disease, Huntington's disease and stroke. They are also investigating the basic biological processes of cells.
- Commercial use of aborted fetuses is highly sensitive and difficult to investigate.
- Therapies using these cells are not yet available and are still being tested in clinical trials.
- So far no fetal SC lines have been deposited in the UK SC Bank.

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