



Science Debate Kit: IVF



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IVF Debate Kit: A structured practice debate on a controversial topic

Should IVF be available on the NHS?

The different 'rounds' of the debate help students think through the issues and reconsider their opinions. The structure also shows them how to build a discussion and back up their opinions with facts.

You can use all eight characters, or fewer, as you wish.

The minimum is the four essential characters (in bold), this gives two for and two against.

Characters

Pro

- **Bekele & Alison Sissoko (married couple)**
- **Dr. Jean Francis (pro IVF doctor)**
- Dai Morris (IVF child)
- Marie & Sally Osborne (same-sex couple)

Against

- **John Wilson (person with illness)**
- **Isobel Lewis (anti-abortionist)**
- Dr. Sudha Tripathi (anti-IVF doctor)
- Sally Robbins (youth worker)

Facilitation tips

Ensure pupils know there is no right or wrong answer.

Be observant of ones who want to speak and are not getting a chance.

Encourage students to give a reason for their opinions.

For groups who may need extra support you can put the following prompt sentences upon the board:-

"I think IVF should/shouldn't be paid for by the NHS because....."

"I think is the most important point to think about."

Designed for KS4.

Has been used with ages 11-18

Learning notes

Learning objective:

- To practise discussing and debating issues and expressing an opinion
- Understand the arguments for and against In Vitro Fertilisation (IVF)

Other learning outcomes:

- Consider social, ethical and factual issues in an integrated way
- Think about different points of view
- Learn to structure a debate and back up their opinions with facts

Curriculum points covered:

HSW

- Using data to draw conclusions
- Societal aspects of scientific evidence
- Developing an argument

Substantive

- To evaluate the benefits of, and the problems that may arise from, the use of hormones to control fertility, including IVF



Lesson plan

Designed for KS4. Has been used with ages 11-18.

Should IVF be available on the NHS?

The different 'rounds' of the debate help students think through the issues and reconsider their opinions. The structure also shows them how to build a discussion and back up their opinions with facts.

Starter: 5 minutes.

What is IVF? Why do people have such different opinions about IVF? IVF covers issues that affect many people. Sometimes the best way to know how someone else feels is to assume his or her point of view.

Main Activity: 35 minutes.

- 1) Split students into as many groups as characters you want to cover.
- 2) Give them their character cards – one per group, and give them a few minutes to read them over.
- 3) Get one student in each group to read out their first section to the rest of the class. What are the class's initial thoughts? Is there one position they identify with or reject?
- 4) Take it in turn to read out their fact. Does it change the way they think?
- 5) Read the issue. Any different feelings?
- 6) Each team asks their question to the character of their choice.

Support: To help students you can put the following prompt sentences up on the board:
"I think IVF should/shouldn't be paid for by the NHS because....."
"I think is the most important point to think about."

Plenary: 10 minutes

Vote for which position they agree with most (if there is one).
Why? Which arguments were the most persuasive?

Note – Pupils can stay in roles all the way through debate, or only for the first round if you prefer. If it's all the way through, give them a chance to express their own opinion at the end and in the plenary.



Background notes

(most info emerges during the activity, through the character cards, but you may want to introduce the topic with some of this background)

IVF stands for In Vitro Fertilisation, a treatment for various forms of infertility. Ova and sperm are mixed together outside a woman's body. Children born by the technique are sometimes called test-tube babies, but the mixing is actually usually done in a Petri dish. Fertilised eggs are then implanted into the woman's womb.

A woman will have to have extensive hormone treatments before having IVF. These stimulate her ovaries so that lots of follicles develop to produce eggs, all at once. These eggs are collected using an ultrasound-guided needle, which enters the ovaries through the vaginal wall. The eggs are then mixed with the sperm and incubated for 18 hours. After a few days usually two of the healthiest looking embryos are implanted into the woman's womb. The success rate is approximately 28% of women becoming pregnant per cycle of treatment.

A point of clarification (relates to info on the character cards)

The National Institute for Clinical Excellence (NICE) (an independent organisation responsible for providing national guidance on the promotion of good health), recommended in 2004 that the NHS should pay for up to 3 cycles of IVF for anyone between the ages of 23 and 39 without children. However, there is still a so-called postcode lottery and in most areas couples will get one round of treatment.

Suggested Homework:

Students (in groups) make a poster/collage arguing for their characters' position.

To order more kits, or sign up for more information
<http://imascientist.org.uk/debate>

This is the first kit of four. The remaining three will be produced termly over the academic year 2009/10. Developed in consultation with teachers.



IVF Debate

Dai Morris



I am one of the first children to be born thanks to IVF. My parents tried for years to have children, but they weren't successful. If it were not for IVF I wouldn't have been born. I am now a teacher.

IVF fact: Birth rates in Britain are falling, and with an increasing elderly population we need more young people to support the economy.

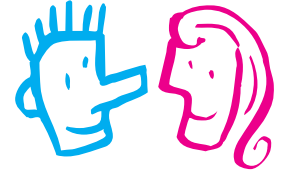
IVF issue: You don't know what the future will hold for children. You can't deny people the opportunity to pass on their genes.

IVF question: Don't you think it's better to spend money to invest in our future?

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IVF Debate

**Bekele and
Alison Sissoko**



We are a married couple in our mid thirties. We are both from large families and have been trying for a baby for 10 years. We desperately want children of our own. We are hopeful that with IVF we could have a child, but we don't earn enough to pay for a course of IVF by ourselves.

Our IVF fact: A course of IVF costs around £2,500 and in most areas of the UK couples that don't already have children can get 1 cycle of IVF paid for by the NHS.

Our IVF issue: We have paid more than enough tax into the NHS over the years to pay for a course of treatment. It's only fair if we get one.

Our IVF question: Why should only rich people be able to have children by IVF?

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IVF Debate

Isobel Lewis



How can people think of having IVF? IVF produces more embryos than a couple need and the ones that aren't used are destroyed. An embryo is the beginning of a life and destroying it is the same as murder. Why do people feel they have aright to do this?

My IVF fact: Each round of IVF could create up to 10 embryos. These are frozen for future use or destroyed. Roughly 1,200,000 embryos created between 1991 and 2005 were destroyed.

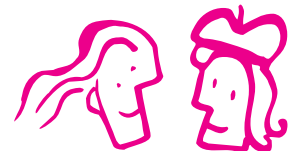
My IVF issue: I believe life begins when the sperm and egg meet.

My IVF question: How can you justify destroying an embryo? When do you think life begins?

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IVF Debate

**Marie and
Sally Osborne**



We have been together for 10 years and are very happy but would love to have a child. We have tried artificial insemination using donor sperm, which didn't work, and considered adoption, but we really want a baby of our own. With IVF we might be able to use one of our eggs and have a child of our own.

Our IVF fact: A change in the law in 2008 removed the 'need for a father' in any applications for IVF, making it easier for same-sex couples to get IVF.

Our IVF issue: Heterosexual couples get pregnant unintentionally, but we have no chance without IVF.

Our IVF question: We love each other just like any other couple. Would you treat us differently if we were straight?

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IVF Debate

Dr Sudha Tripathi



There is growing evidence that children born through IVF have more health problems than children born through normal methods. And I treat many women who suffer a potentially fatal condition called Ovarian Hyperstimulation Syndrome (OHSS), caused by fertility drugs used in IVF. We really need more long-term studies into the risks of IVF.

IVF fact: One study showed that children born through IVF spent almost twice as long in hospital as naturally conceived children.

IVF issue: The NHS should make people well, not make them ill!

IVF question: People desperate for children may not weigh up the risks properly, shouldn't the NHS be more responsible?

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IVF Debate

Sally Robbins



I work in a children's home with children whose birth families are not able to bring them up. Many of them have had very stressful lives with no stability. Instead of using IVF, people should adopt and give these children a permanent family who will care for them and help them thrive.

IVF fact: 80,000 children are in care in the UK alone.

IVF issue: Many of these children will grow up not knowing what it's like to have the stable support of a loving family, through no fault of their own.

IVF question: Wouldn't you like to give your love to a child who really needs it?

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IVF Debate

John Wilson



IVF is such a waste of the NHS budget. I've just found out I have advanced kidney cancer and only a few months to live. There's no cure, but there are drugs which could give me a few more months of life. I can't get those drugs on the NHS because it is too expensive. I just want some more time with my wife and kids to say goodbye.

My IVF fact: Guidelines say that the NHS should pay for up to 3 cycles of IVF for anyone between the ages of 23 and 39 without children. That could be a total of £7500 per couple who want IVF.

My IVF issue: Having a child is a choice but I didn't choose to have cancer.

My IVF question: Isn't it better to keep people alive than to help people have children?

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IVF Debate

Dr Jean Francis



I have been working as an IVF doctor for 20 years. I have met many childless couples throughout my career, many of them would have no hope of having a child if it wasn't for IVF. I have seen the joy that having a child has brought them. Infertility is not a choice and they deserve the chance to have a baby.

My IVF fact: The first course of IVF was used in 1978 and around 12,000 children are born in the UK through IVF every year.

My IVF issue: The NHS exists to assist in quality of life, not just basic healthcare.

My IVF question: If we have technology that can make so many people happy why don't we use it?

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