

FACTFILE: GCSE RELIGIOUS STUDIES DEVELOPMENTS IN BIOETHICS



The nature of human infertility and the means to overcome it

Learning outcomes:

Students should be able to demonstrate knowledge and understanding of, and critically evaluate:

- the nature of human infertility and the means to overcome it;
- the role of in vitro fertilisation treatment in overcoming human infertility and issues arising from this treatment;
- the status of the embryo, and the moral problems associated with destroyed embryos and embryo experimentation;
- the issues surrounding human surrogacy;
- the role of the Human Fertilisation and Embryology Authority in regulating developments in bioethics; and
- biblical and church teaching that is relevant to new reproductive technologies.

What is infertility?

Human infertility means that a couple cannot conceive a child. There are various reasons for infertility: sometimes the man does not produce healthy sperm or sometimes the woman has difficulty producing eggs. There might be a medical condition leading to the reduced or total inability of a couple to conceive. These could include a blocked fallopian tube, thyroid problems or an imbalance in hormones.

Overcoming infertility

Fertility treatment is the name given to medical procedures that can help people to overcome some of these difficulties. Infertility can cause stress and unhappiness for people, so in recent years there has been much research into the means to try and overcome it. Some of the common methods include:

- **Natural methods** – Some couples may find it difficult to conceive because of lifestyle pressures, such as stress and workload. It may be possible to overcome infertility by making healthy lifestyle choices, such as eating a nutritious diet and avoiding alcohol.



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- **Medicines** – If there is a problem with hormones then taking fertility drugs may help to overcome infertility. They may even help if the cause of infertility is unknown.
- **Surgery** – This might be effective if there is a blocked fallopian tube or some other internal problem. In some cases, an ovary transplant might be possible for a woman who cannot produce her own eggs.
- **Assisted conception** – This is the most popular method used today, even though it can have a low success rate and there are a number of ethical issues associated with many of the procedures. Techniques include IVF (in vitro fertilization) and IUI (intrauterine insemination). IUI is also known as artificial insemination. It involves inserting the semen directly into the womb, rather than fertilizing the egg in a test tube, as with IVF. Modern advances in IVF were pioneered by Patrick Steptoe and Robert Edwards, leading to the birth of the first ‘test tube baby’, Louise Brown, in 1978.

TASKS

Answer the following questions

1. Explain why some couples may be unable to have a child.
2. Outline some of the methods that can be used to overcome infertility.
3. Do you consider any of these methods to be morally unacceptable? Give reasons for your answer.

Discuss with a partner or in a small group

1. Is a child a right or a gift from God?
2. Should infertile couples accept that they are childless, or try to adopt?

The role of in vitro fertilisation treatment in overcoming human infertility and issues arising from this treatment

What is IVF treatment?

There are different types of infertility treatment and one of the most common is IVF. This stands for ‘in vitro fertilisation’ (in vitro means ‘in glass’). IVF involves a human egg and sperm being brought together in a test tube or petri dish by doctors. If the egg is fertilized successfully, then doctors will place the embryo in the woman’s uterus, where it will continue to grow and develop in the usual way. The IVF procedure is not always successful, so doctors will fertilise more than one egg so the healthiest embryo can be chosen for implantation.



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Why are there concerns about IVF treatment?

- The process of fertilizing more eggs than are needed can lead to the creation of ‘spare’ embryos that are not needed for implantation. Many people are concerned about what happens to these embryos. Is it acceptable to use them for research? Or should the ‘spare’ (or ‘doomed’) embryos simply be destroyed? Many Christians see this as committing murder as they believe life begins at conception, with every embryo being a potential person. All human life is sacred because people are created in the ‘image of God’.
- Not all ‘spare’ embryos are destroyed or used for research. Some might be frozen for later use if the couple decide to have more children through IVF. This is also a



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practice which some people are concerned about. Can it be right to create a human life and then freeze it indefinitely?

- When an embryo is placed in the woman's uterus, there is no guarantee it will implant successfully. It can be usual practice to place more than one embryo in the uterus, then if ultrasound scans show that more than one have implanted, the healthiest will be selected and the 'extra' embryos removed by a selective abortion. For many Christians, this is as morally unacceptable as having an abortion for an unwanted pregnancy.
- IVF procedures do not always use the sperm and eggs from the couple wishing to have a child. Sometimes it is necessary to use donated sperm and eggs, usually from an anonymous donor. Some people see this as a form of adultery as a 'third party' is needed in the creation of new life.
- A further concern is over who should be allowed to receive IVF treatment. Some people feel it should only be available to heterosexual married couples, especially if the treatment is being given on the NHS. IVF treatment can make it possible for single people and same sex couples to have children, sometimes with the help of a surrogate mother. Some Christians are concerned that this is not what God intended and goes against Bible teaching about family relationships.
- Some people are not in favour of IVF treatment because of the possible impact on the children when they grow up. It could be distressing to discover that there is no genetic link to either one or both parents, but to anonymous donors.
- IVF treatment can have a low success rate. It can be very expensive (either for the NHS or the couple themselves) and lead to a great deal of strain on the couple if they face a number of unsuccessful treatments.

Arguments in favour of IVF treatment

Childlessness can cause great distress to a couple who want to raise a family. IVF treatment can help them to have children who may be genetically theirs. Adopting a child is a choice for some couples, but is not an option for everyone, nor is the child their genetic offspring. Using embryos for research and experimentation can help doctors towards a greater understanding of treatments for diseases, including Alzheimer's disease, cancer and heart disease. As a result of IVF techniques being developed to help infertile couples, other advances in medical science have been made. These include the screening of embryos to eliminate hereditary diseases and the creation of 'saviour siblings'. This is a child conceived through IVF as a source of donor organs or cells for an older brother or sister with a life threatening condition.

TASKS

Organise a class debate with the motion:

'This house believes that IVF treatment is a gift to society.'

The status of the embryo, and the moral problems associated with destroyed embryos and embryo experimentation

When decisions are being made about whether a human embryo should have the chance of life, whether it should be used for medical research or simply disposed of, status of the embryo is central. Under UK law, an embryo has no rights until 14 days old, then after this limited rights. With the exception of Northern Ireland, an embryo can be legally aborted up to 24 weeks of pregnancy. After this, it is thought to be a viable life and has full rights.

However, many people hold the opinion that an embryo of any age has the same status as any human

being, as life begins at conception. This is the point when the sperm fertilized the egg and the full genetic information is present to create a unique individual. Many people feel that because an embryo cannot speak up for itself, its rights must be protected by law.

Others argue that an embryo does not have the status of being a person, and so is not due rights. In addition, if an embryo can be used in research to bring benefit to others as a whole, then it is morally justifiable to sacrifice its welfare. Embryo experimentation could lead to scientists finding new ways of preventing and curing serious conditions, such as motor neurone disease or Parkinson's disease. Is it morally acceptable to treat human life in this way?

A key question regarding the status of the embryo is when does a person become a person? Is it:

- At conception?
- At 14 days old?
- When there is brain activity and the ability to feel pain?
- At viability, the point at which a foetus could live outside the womb?
- At birth?

The Roman Catholic Church teaches that life begins at conception. However, some Christians disagree with this. One reason is that large numbers of embryos, possibly up to 50%, naturally fail to implant and are discarded naturally. Therefore, it is not acceptable to give rights to something that may not last longer than a few days or weeks.



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TASKS

Discuss with a partner or in a small group.

1. When does human life begin?
2. Is an embryo a person with full human rights?
3. Should embryos ever be used for experimentation?
4. Is it morally right to create a child to use as a donor for a sick sibling?

The issues surrounding human surrogacy

What is surrogacy?

Surrogacy is when an embryo is placed in the uterus of a host (or surrogate) mother. The surrogate's eggs may have been used, or she may have no genetic link to the baby she is carrying. The baby will be handed over to the couple who are going to raise the child shortly after birth. There are two types of surrogacy:

1. **Traditional surrogacy (also known as partial surrogacy)**
This is when the eggs of the surrogate mother are used. They may be fertilised using donor sperm or the sperm of the commissioning male partner. The sperm is usually transferred directly to the surrogate's uterus, using the method of IUI, so fertilization takes place naturally.
2. **Gestational surrogacy (also known as full surrogacy)**
This form of surrogacy does not use the surrogate's



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own eggs and she will have no genetic link to the baby she is carrying. An embryo is created through IVF, then implanted in the uterus.

When the baby is born, the surrogate mother is considered to be the legal mother and her name is on the birth certificate. The couple who are going to raise the baby (known as the commissioning couple) must adopt the child within six months and the birth certificate is then changed. However, when the child reaches 18 years of age, he or she can request to see the original birth certificate and find out who the surrogate mother was.

According to the HFEA, surrogacy is legal if it is carried out for altruistic reasons. This means a woman is not a surrogate for financial gain, but because she wants to help a childless couple to have a baby. She can, however, be paid expenses during pregnancy to cover the cost of maternity clothes, transport for medical appointments and nutritious food, for example. Sometimes a friend or family member may offer to be a surrogate for a couple.

Why are there concerns about surrogacy?

- Not all surrogacy takes place for altruistic reasons. In some parts of the world, commercial surrogacy is legal and it has become a huge money-making business. Many people are concerned that this involves treating a child as a commodity that can be paid for. Commercial surrogacy can also involve the exploitation of young women living in poverty.
- All the main Christian churches agree that surrogacy is immoral and that children should not be created for adoption. The Roman Catholic Church describe surrogacy as 'gravely immoral' (CCC 2376) as it is bringing additional people into the marriage relationship and creation of a child.
- Surrogacy often involves the use of IVF techniques, so those who have a moral objection to the creation, and eventual destruction, of 'spare embryos' will also object to surrogacy for these reasons.
- There are also concerns about surrogacy from a non-religious point of view. It may lead to the child having identity issues in later life, perhaps having to come to terms with up to three mothers (the surrogate, the provider of the egg and the mother raising the child) and two fathers (the provider of the sperm and the father raising the child).
- There have been cases where the surrogate mother has bonded with the child and refused to give the baby to the commissioning couple. This has caused legal difficulties over ownership of the child.



Possible benefits of surrogacy

- For some couples, surrogacy is their only means by which they can have a child, as IVF treatment has proved unsuccessful and they are not in a position to be able to adopt. There may be health reasons why a woman is unable to carry a child through pregnancy. Surrogacy can be the answer to years of unsuccessful attempts to have a family.
- Surrogacy also offers the possibility for the baby to share the same genetic characteristics as one or both parents, unlike adoption.
- Surrogacy can enable same sex couples to have a child. Two men in a relationship may commission a surrogate mother, with one of them providing the sperm.

TASKS

Answer the following questions

1. What is 'surrogacy'?
2. Describe the different types of surrogacy.
3. Explain what the law in the UK allows on surrogacy.
4. "Surrogacy can never be seen as an act of Christian love." Do you agree? Give reasons for your answer and show that you have considered different points of view.
(This question needs an extended answer.)

Using a computer or ipad

Make a presentation to show some of the concerns about the new techniques in human reproduction.

The role of the Human Fertilisation and Embryology Authority in regulating developments in bioethics

The HFEA are the UK's independent regulator of fertility treatment and research using human embryos, and is the first of its kind in the world. They aim to ensure that everyone who steps into a fertility clinic, and everyone born as a result of treatment, receives high quality care. The HFEA do this by licensing, monitoring and inspecting fertility clinics and providing free, clear and impartial information about fertility treatment, clinics and egg, sperm and embryo donation. They also collect data about fertility treatments. This information is invaluable for many reasons, including being the way that people conceived with a donor can learn more about their genetic origins. The HFEA regulate fertility clinics and projects involving research with human embryos. This involves licensing, inspections and setting standards. Regulation is important because it ensures that the work carried out is to a certain standard; that only qualified people can do it; and that research on embryos is only done where there is a real need and in a way that is ethical. The HFEA provide guidance to clinics and research centres on how to meet their legal requirements in a Code of Practice.

Information taken from: <https://www.hfea.gov.uk/about-us/>

What is the law in the UK?

On 1 November 1990, the Parliament of the UK passed The Human Fertilisation and Embryology Act 1990 (HFE Act) to bring under regulation three aspects of assisted reproduction:

- The creation, care, and use of human embryos outside of the body of a mother;
- The collection, care, and use of donated human sperm and eggs;
- The storage of these human gametes and embryos.



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The HFE Act also covers the use of human embryos in scientific research. Scientists can use human embryos in research for a limited number of reasons:

- To increase knowledge of the causes of diseases and miscarriage;
- To encourage advances in the treatment of infertility and the development of more effective contraception;
- To detect abnormalities before an embryo is implanted.

Information taken from: <https://embryo.asu.edu/pages/human-fertilisation-and-embryology-act-1990>

The Act was amended in 2008 and now includes the following points:

- Ensuring that the creation and use of all human embryos outside the body - whatever the process used in their creation - are subject to regulation.
- A ban on selecting the sex of offspring for social reasons.
- Allowing for the recognition of both partners in a same-sex relationship as legal parents of children conceived through the use of donated sperm, eggs or embryos.
- Enabling people in same sex relationships and unmarried couples to apply for an order allowing for them to be treated as the parents of a child born using a surrogate.

Information taken from: <https://www.hfea.gov.uk/>

TASKS

Answer the following questions.

1. What is the HFEA?
2. What law in the UK controls what is allowed with human embryos?
3. Describe how the HFEA regulates developments in bioethics.

Biblical and church teaching that is relevant to new reproductive technologies

Bible teaching

Fertility treatment is the result of modern medical science. However, this does not mean that there is nothing relevant in the Bible to guide Christians in their thinking. Bible teachings that place emphasis on the sanctity of human life and the unique value of every child are very relevant. There are also references to childless couples and their approach to this situation.

Exodus 20: 13 “Do not commit murder.”

For many Christians, this commandment teaches that the taking of all human life is wrong. If life begins at conception, then the destruction of ‘spare embryos’ can surely be seen as murder.

Psalms 139: 13–16(a) “You created every part of me; you put me together in my mother’s womb. I praise you because you are to be feared; all you do is strange and wonderful. I know it with all my heart. When my bones were being formed, carefully put together in my mother’s womb, when I was growing there in secret, you knew that I was there—you saw me before I was born.”

In these verses the author of Psalms is praising God for his marvelous creation of human life. Every human being is carefully put together by God in the womb and is known to God. This unique creation does not start to exist as a person at birth, but when growing in secret in the womb. Therefore this life should be respected and not destroyed.

Jeremiah 1: 5 “I chose you before I gave you life, and before you were born I selected you to be a prophet to the nations.”

God spoke to Jeremiah and told him that he had been chosen from before he was born. This shows how God knows each person, and has plans for them, from before they were born. This verse is also teaching that human life comes from God and must be treated with respect.

1 Samuel 1: 9–18

In this passage, Hannah is desperate to have a child and prays “*Lord Almighty, look at me, your servant! See my trouble and remember me! Don’t forget me! If you give me a son, I promise that I will dedicate him to you for his whole life.*” Eli the priest noticed her and Hannah explained the reason for her distress. “*Go in peace,*” Eli said, “*and may the God of Israel give you what you have asked him for.*” Hannah’s prayer was answered and she gave birth to a son.

This incident can teach Christians that God is in control and that the response to a distressing situation should be prayer. God hears people’s prayers and answers them in the way he thinks is best. For many Christians, this should be the response to the situation of being childless, rather than fertility treatment.

Church teaching

There are different opinions among Christians about the use of fertility treatment. Some are not in favour as they see this as interfering with God’s plan. They might take the view that if a couple cannot have a child naturally, then God does not intend for them to have a family. If God is seen as the sole creator of human life, this can lead to problems accepting a child created artificially in a laboratory. The only acceptable alternative to fertility treatment or surrogacy would be adoption.

However, other Christians would disagree, seeing fertility treatment as a means of preventing suffering and distress for couples who cannot conceive naturally. Some Christians may see the skills of doctors and scientists as God-given and intended to be used to prevent human suffering and give a better quality of life.

The Roman Catholic Church

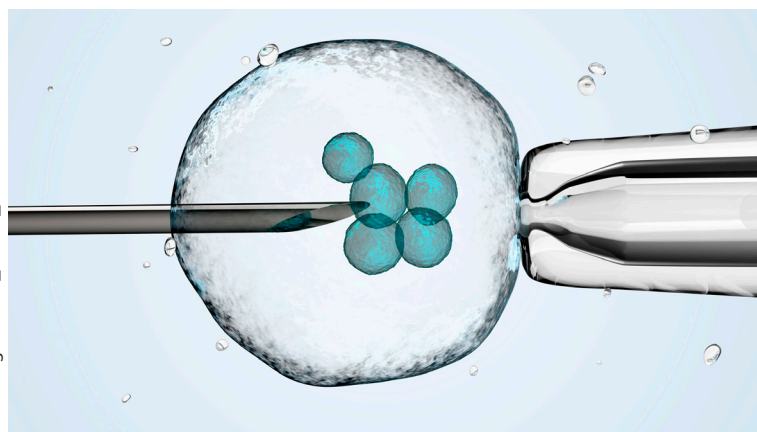
Roman Catholic teaching supports the view that a marriage relationship should be open to children, but in a way that is in line with God’s intention for the creation of new life. Human beings should not be created in a laboratory. Processes which lead to the destruction of embryos are immoral, as human life begins at conception. In addition, the possible introduction of a ‘third person’ into the marriage relationship is seen as adultery and therefore wrong.

The Church of England

The Church of England are not against the use of IVF techniques. However, they have expressed concern about whether treatment should be offered to same-sex couples and single women. In July 2003 the General Synod affirmed the sanctity of the human embryo and the need to treat it with profound respect. The Synod recognised there are different views among Christians on the morality of embryo research. (*Report of Proceedings, 2003, General Synod July Group of Sessions, Church of England, 34(2) page 234*)

The Methodist Church

The Methodist Church believes it is right for scientists to try to learn more about causes and cures of infertility. It accepts using ‘spare’ embryos in medical research, but only up to 14 days after fertilisation.



TASKS

Answer the following questions.

1. Choose three Bible references. Explain how each one can guide Christians in their thinking about bioethics.
2. Do you think Churches should let people make up their own minds about issues such as IVF and surrogacy? Give reasons for your answer.

Work with a partner

1. **Read case study 1.** Do you think all couples should receive IVF treatment on the NHS? How many rounds of treatment should each couple receive? Make a list of rules that you and your partner think are fair for everyone.
2. **Read case study 2.** Do you think the law in the UK should allow couples to use a surrogate to have a child? Fill in the table to record your views.

Situations where surrogacy should be allowed...	Situations where surrogacy should not be allowed...

Case studies

Derry couple who spent £20,000 for IVF call for change in 'unfair' rules in Northern Ireland

A couple made to fund their continuing attempts to have a family through IVF want Northern Ireland brought into line with treatments on offer in the rest of the UK. Deborah and Stephen Cross from Londonderry are about to undergo their fifth cycle of IVF treatment. They have helped set up the lobby group Fairness in Fertility, which is calling on the Department of Health to offer three free IVF cycles to infertile couples here. The National Institute for Health and Care Excellence (NICE) - an executive non-departmental public body of the Department of Health in the UK - recommends three cycles of IVF should be offered to infertile couples. Currently only one cycle is given free of charge to couples from Northern Ireland. Their counterparts in Scotland get three and in Wales it is two. In England the number varies. The Derry couple have been trying to have a family through IVF since 2010 when they were told by doctors they would not be able to conceive naturally. The first and only free cycle did not result in Mrs Cross getting pregnant. While she did conceive with the second cycle, sadly they lost that baby but have bravely continued with treatments in the hope they will have their longed-for child. To date they have spent £20,000 on private treatments.

Belfast Telegraph 2016

<https://www.belfasttelegraph.co.uk/news/northern-ireland/derry-couple-who-spent-20000-for-ivf-call-for-change-in-unfair-rules-in-northern-ireland-35196130.html>

'We love our babies, regardless of the law on surrogacy'

Sean Malone and Fiona Whyte returned from India with twins who were born through surrogacy. The dark-eyed toddlers still attract a second look. The girl has a slight look of her father about her but otherwise they don't seem to strongly resemble their parents, who might anyway be old enough to be their grandparents. The children are walking now, and beginning to talk and everywhere they go they are tiny curiosities. Strangers tentatively introduce themselves. Just last week the family were on holidays and the question inevitably came again: "where did you get them?"

Sean Malone (55) and Fiona Whyte (53) have long since resigned themselves to the frequency of such inquiries, which are mostly good natured and supportive. The twins have become well known faces in the Co Clare town, where Sean owns a pub. He and Fiona have waged a legal battle to become recognised as the parents of their two children. The children have Indian birth certificates, with both Sean and Fiona named as their parents on the certs. Last July the couple went to court to formalise their status in relation to the children. Sean sought a declaration of parentage and guardianship. "If the court ruled in our favour that would leave Sean open to apply for passports for them," Fiona says. "That was what happened and now Sean is their legal guardian and they have their own passports."

The couple initially tried to have a child through IVF. They were treated at a clinic in Spain and were successful on the first attempt, but Fiona miscarried. They tried four more times but each time they were unsuccessful. Adoption was not an option, assuming they wanted a baby: during the process they were informed by social workers here that due to their age they would only be eligible to get an older child, possibly a child with special needs.

They saw no other option but to go down the road of surrogacy. In the end Sean and Fiona opted to try to find a surrogate in India, with Fiona making preliminary inquiries online and managing to speak to one person who had gone to India. The couple opted to travel to the reputable and regulated Corion Fertility Clinic in Mumbai, India, where Sean gave a sperm sample and they selected the surrogate - Shobha - whose eggs were not used. The agreement was that Shobha would make around £3,500 out of the £21,000 that Sean and Fiona paid the clinic.

Belfast telegraph 2015

<https://www.belfasttelegraph.co.uk/life/features/we-love-our-babies-regardless-of-the-law-on-surrogacy-31346721.html>

