

Embryology, Fertility Treatment and Cloning

To use Assisted Conception?

- Many Christians feel that to use **any** form of assisted conception goes against God's plan for their lives.



Biblical References:

Psalm 139: 13, 16

- *'For you created my inmost being; you knit me together in my mother's womb... Your eyes saw my unformed body. All the days ordained for me were written in your book before one of them came to be.'*
- Shows two things. Firstly, God is responsible for the creation of life, both **body and soul**.
- Secondly, God has a **plan** for that life.

Jeremiah 1: 5

- *'Before I formed you in the womb, I knew you...'*
- God is responsible for the formation of life in the womb. Life is a gift from God.

1 Samuel 1: 5

- *'But to Hannah he gave a double portion because he loved her and the Lord had closed her womb.'*
- God has a **plan** for everyone's life. In some cases this means that He has planned that you do not have children.

Types of Assisted Conception

Artificial Insemination:

This can be broken down into **AIH** (Artificial Insemination by the **Husband**) and **AID** (Artificial Insemination by a **Donor**). Sperm is collected and inserted into the uterus where fertilisation should occur normally.

IVF:

In Vitro Fertilisation. Eggs are fertilised outside the womb and the resulting embryo(s) are implanted into the uterus.

G.I.F.T:

Gamete Intra-Fallopian Transfer. Eggs and sperm are harvested and then inserted directly into the fallopian tube via catheter. Fertilisation should occur naturally.

Egg Donation:

A donor egg is fertilised by the sperm of the partner of the woman whose uterus the embryo is to be implanted in.

Embryo Donation:

Similar to egg donation except that the egg is fertilised by a donor (rather than the woman's partner) as both partners may be infertile or carry a genetic defect.

Surrogacy:

A woman volunteers to carry a baby to full term (possibly for money) and gives it to the childless couple at birth. There are different types of surrogacy:

- **AI Surrogacy:** intended father's sperm and surrogate's egg.
- **IVF Surrogacy:** embryo is created by the intended parents and transferred to the surrogate.
- **Donor Surrogacy:** either donor sperm or donor egg.

Generally AI is considered fine as it is the most natural of the methods outlined. However, **Catholics feel that AID can be considered to be adultery.**

IVF can be seen as a **wasteful** procedure with many perfectly healthy embryos unused. Embryos are **frozen**, but can only be stored for **5 years** before being **destroyed**.

Catholics disagree with the creation of surplus embryos as they feel that life begins at conception: destroying these embryos = murder. *Sanctity of Life*. 'Natural Law'

Catholics prefer GIFT as the **eggs are fertilised naturally** in the fallopian tube unlike other procedures which create embryos outside the womb.

In both **Embryo Donation** and **Donor Surrogacy**, neither of the intended parents may be genetically related to the foetus!

Surrogacy is dangerous and there have been several high profile cases where the surrogate has **died**. Furthermore, there are also instances of people paying for babies and the surrogate opting to keep the child.

Genetic Engineering:

Definition: 'altering something's DNA for a specific purpose'. It can be broken into:

Somatic Cell Gene Therapy:

- Medical. Alterations to the DNA remain in the body. Cannot be passed on.

Germ Line Gene Therapy:

- Medical. These cells are involved in production of eggs and sperm so any alterations may be passed onto future generations.

Enhancement Genetic Engineering:

- DNA is altered to change physical appearance. Currently illegal.

Cloning:

Definition: 'creating a genetically identical animal or plant from another':

Therapeutic Cloning:

- Medical. Tissue (not a baby) is created to replace damaged cells using stem cells taken from embryos.

Ethical Issues to Consider:

'**Admixed embryos**' (combining animal and human DNA to provide a source of stem cells) became **legal in 2008**. '**Saviour siblings**' – embryos created with the right DNA to provide transplants for sick brothers / sisters

Church Teaching on Cloning:

Catholic – disagree with cloning. It is against Natural Law and the Sanctity of Life (embryos are created simply to be used for their stem cells and destroyed). Humans should **not** be used as a means to an end. They are an end in themselves

Euthanasia and Suicide

DEFINITIONS:

Voluntary Euthanasia:

- Often called 'Assisted Suicide', this is where the patient requests to die. Usually they will be unable to kill themselves.

Involuntary Euthanasia:

- When the person killed is capable of consenting to their own death but does not do so. This amounts to murder in most cases.

Non-Voluntary Euthanasia:

- When the patient is unable to consent. A good example would be of a patient in a coma from which they will not recover. This is also termed a 'PVS' or 'Persistent Vegetative State'.

All of these can all be 'passive' or 'active'.

'Passive' Euthanasia:

- This is when treatment that is artificially prolonging life is withdrawn, allowing the patient to die. A good example is turning off a ventilator.

'Active' Euthanasia:

- This is deliberately taking action designed to end a patient's life. For example, a doctor could deliberately prescribe an overdose. This is currently illegal in the UK.

Euthanasia: from the Greek words 'eu' (εὖ meaning 'good' or 'gentle') and 'thanatos' (θάνατος meaning 'death'). Euthanasia is essentially taking a life to minimise suffering – sometimes called a 'mercy killing'.

Suicide: to deliberately end your own life.

Christian Teaching on Euthanasia:

1. Human life is a gift from God. As such it is sacred.
2. Death is an event in eternal life, not an end in itself. **The soul lives on after the body dies.**
3. People should receive **good terminal care.** All of the patients' needs, including the spiritual should be met.

Most Christian denominations do not **oppose Passive Euthanasia.** Sometimes extraordinary means of prolonging life may be inappropriate.

'Double Effect' and Euthanasia:

Whilst **Catholics** agree with the above, the doctrine of '**Double Effect**' can also be applied. For example, painkilling drugs may shorten a patient's life but the intention was to relieve pain, not kill

Christian Alternative to Euthanasia – The Hospice Movement:

The modern Hospice movement, set up by Dame Cicely Saunders in 1967, is founded on the principle of '**Palliative Care**'. Patients' needs are met through counselling, pain relief, support for carers and an emphasis on dignity and the value of life.

Christians on Suicide:

1. Suicide used to be seen as a mortal sin (i.e. you have committed murder on yourself).
2. These days, churches realise that suicide is the last resort of people that are desperate. The churches feel that **counselling and support** are important, **not judgement.**

Christian response to Suicide – The Samaritans

Started by Chad Varah in 1953. Set up to provide confidential counselling to those considering suicide. The Samaritans promote the idea of loving your neighbour and providing support so that people won't feel isolated and alone and won't feel like they have to resort to suicide.

KEY CONCEPT: 'Agape':

Pronounced 'a-ga-pay'. This is selfless, non-physical love. 'Agape' (ἀγάπη) describes the love God has for people.

Jesus commanded people to '*love (agape) one another as I have loved you.*' John 13: 34

KEY CONCEPT: 'Sanctity of Life'

1. **All life is a gift from God** (Genesis 1; Jeremiah 1:5; Psalm 139 etc)
2. **Human Life is particularly special** because it is the only thing made in **God's 'image'** or 'likeness' (Genesis 1:27).
3. We should therefore not feel free to take life (Exodus 20)

Biblical References:

2 Samuel 1: 9-16

- King Saul is terribly wounded in battle and says to a comrade: '*Stand over me and kill me! I am in the throes of death, but am still alive.*'
- The soldier kills him as asked. When he reports what happened to King David, David has him killed because he had '*killed the Lord's anointed.*'

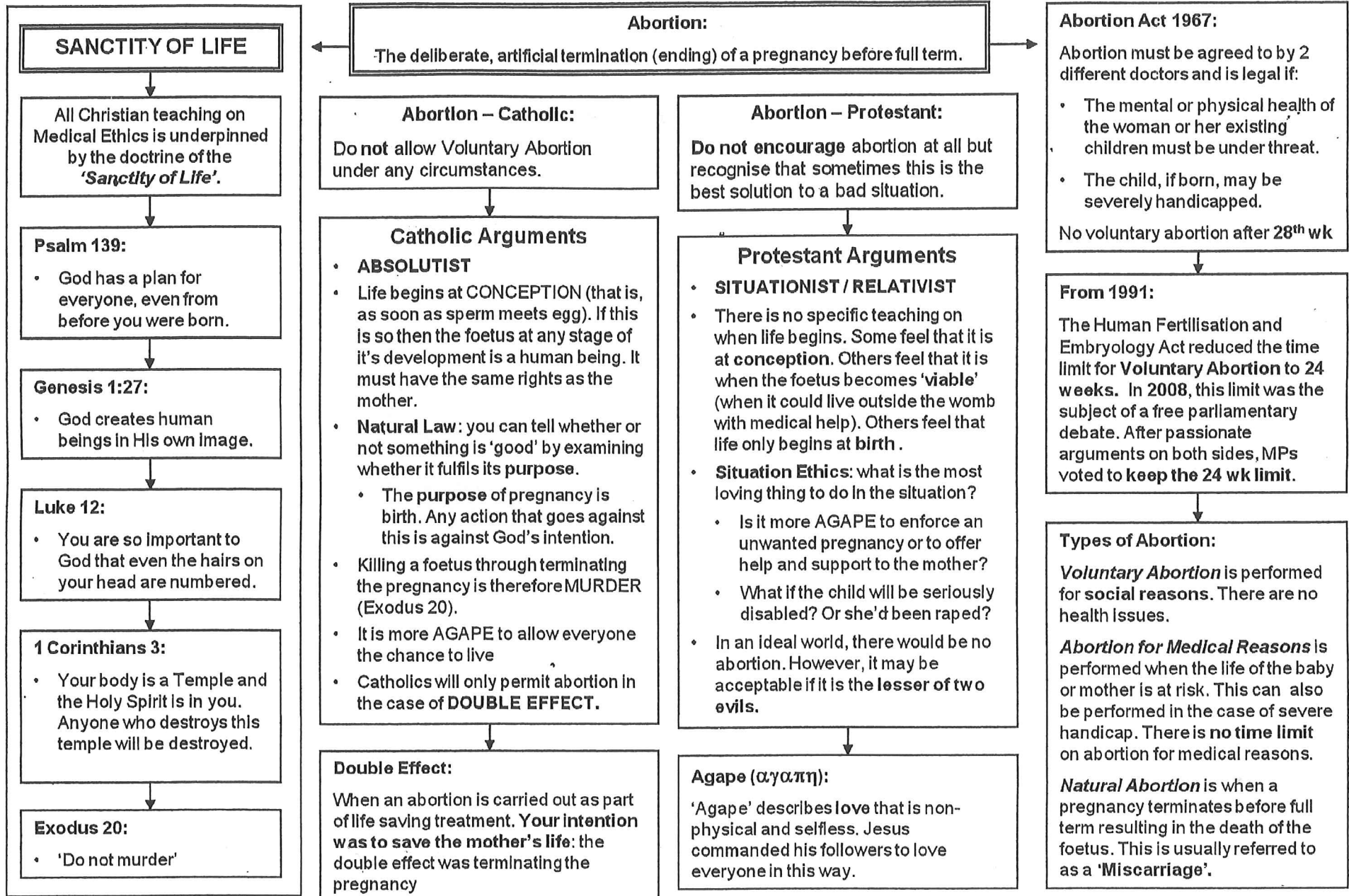
Job:

- The Old Testament book of Job tells the story of an innocent and godly man who suffers all kinds of terrible misfortunes.
- His wife advises him to '*Curse God and die!*' (kill himself) as it would be better than suffering.
- Job refuses to do so and accepts his suffering. He is eventually rewarded by God for his faith.

Exodus 20:

- '*Do not murder.*'

Christianity and Abortion



SANCTITY OF LIFE

All Christian teaching on Medical Ethics is underpinned by the doctrine of the 'Sanctity of Life'.

Psalm 139:

- God has a plan for everyone, even from before you were born.

Genesis 1:27:

- God creates human beings in His own image.

Luke 12:

- You are so important to God that even the hairs on your head are numbered.

1 Corinthians 3:

- Your body is a Temple and the Holy Spirit is in you. Anyone who destroys this temple will be destroyed.

Exodus 20:

- 'Do not murder'

Abortion:
The deliberate, artificial termination (ending) of a pregnancy before full term.

Abortion - Catholic:
Do not allow Voluntary Abortion under any circumstances.

Catholic Arguments

- ABSOLUTIST**
- Life begins at **CONCEPTION** (that is, as soon as sperm meets egg). If this is so then the foetus at any stage of it's development is a human being. It must have the same rights as the mother.
- Natural Law:** you can tell whether or not something is 'good' by examining whether it fulfils its **purpose**.
 - The **purpose** of pregnancy is birth. Any action that goes against this is against God's intention.
- Killing a foetus through terminating the pregnancy is therefore **MURDER** (Exodus 20).
- It is more **AGAPE** to allow everyone the chance to live
- Catholics will only permit abortion in the case of **DOUBLE EFFECT**.

Double Effect:
When an abortion is carried out as part of life saving treatment. **Your intention was to save the mother's life:** the double effect was terminating the pregnancy

Abortion - Protestant:
Do not encourage abortion at all but recognise that sometimes this is the best solution to a bad situation.

Protestant Arguments

- SITUATIONIST / RELATIVIST**
- There is no specific teaching on when life begins. Some feel that it is at **conception**. Others feel that it is when the foetus becomes '**viable**' (when it could live outside the womb with medical help). Others feel that life only begins at **birth**.
- Situation Ethics:** what is the most loving thing to do in the situation?
 - Is it more **AGAPE** to enforce an unwanted pregnancy or to offer help and support to the mother?
 - What if the child will be seriously disabled? Or she'd been raped?
- In an ideal world, there would be no abortion. However, it may be acceptable if it is the **lesser of two evils**.

Agape (αγαπη):
'Agape' describes **love** that is non-physical and selfless. Jesus commanded his followers to love everyone in this way.

Abortion Act 1967:
Abortion must be agreed to by 2 different doctors and is legal if:

- The mental or physical health of the woman or her existing children must be under threat.
- The child, if born, may be severely handicapped.

No voluntary abortion after **28th wk**

From 1991:
The Human Fertilisation and Embryology Act reduced the time limit for **Voluntary Abortion** to **24 weeks**. In 2008, this limit was the subject of a free parliamentary debate. After passionate arguments on both sides, MPs voted to **keep the 24 wk limit**.

Types of Abortion:

Voluntary Abortion is performed for **social reasons**. There are no health issues.

Abortion for Medical Reasons is performed when the life of the baby or mother is at risk. This can also be performed in the case of severe handicap. There is **no time limit** on abortion for medical reasons.

Natural Abortion is when a pregnancy terminates before full term resulting in the death of the foetus. This is usually referred to as a '**Miscarriage**'.

The Use of Animals in Medical Research

Biblical References:

Luke 8: 26-39

The Healing of a Demon-Possessed Man ("Legion" and the Pigs)

- Jesus meets a demon-possessed man who has been an outcast for some time
- The man calls out for Jesus not to 'torture him'. Jesus asks the man's name and he replies '*Legion, for we are many*'.
- Jesus casts out the demons into a herd of pigs, that immediately run into the river and are drowned.

Exodus 20

- '*Do not murder*'.

Genesis 1: 28

- '*Rule over the fish of the sea and the birds of the air and over every living creature...*'

Genesis 2: 15

- '*The Lord God took the man and put him in the Garden of Eden to work it and take care of it...*'



'Sanctity of Life':

1. **All life is a gift from God** (Genesis 1; Jeremiah 1:5; Psalm 139 etc)
2. **Human Life is particularly special** because it is the only thing made in God's 'image' or 'likeness' (Genesis 1:27).
3. We should therefore not feel free to take life (Exodus 20)

The 'Sanctity of Life' teaches that ALL life is a gift from God. However, humans make use of animals in many different ways, some of them have been questioned ethically. In the Bible, humans are called to 'rule over' and 'take care' of animals and the planet. These concepts are called 'Dominion' and 'Stewardship'.

'Dominion':

- Based on **Genesis 1: 28**. Humans are told to 'rule over' animals and the planet.
- Dominion suggests power and authority to make decisions on the fate or welfare of the thing one has dominion over.
- Does not necessarily suggest compassion, but people can have authority over something and still show love.

'Stewardship':

- Based on **Genesis 2: 15**. Humans are told to 'take care' of animals and the planet.
- To be responsible for the safety of something. To look after something.
- Stewardship suggests making decisions based on the best interest of the thing one is Steward to.
- Suggests a compassionate role.

FOR Animal Testing:

- ☺ God has given humans the authority to run the planet as they see fit. This includes using animals to save human lives (Dominion – Christian).
- ☺ Testing procedures and products on animals has had a positive effect overall.
- ☺ The medical advances in the treatment of cancer, cardiac complaints and infectious diseases is hard to ignore.
- ☺ 'Agape' – what is more loving? To save life through testing or to allow people to die to save a few lab animals?
- ☺ 'Image of God' – human life is more important as we are made in God's image.

AGAINST Animal Testing:

- ☹ Not everyone agrees with the morality of animal testing: is a human life any more valuable than that of an animal? After all, both were created by God (Stewardship – Christian).
- ☹ Animal testing is painful and destructive (Exodus 20).
- ☹ Some products tested on animals are cosmetic. Surely they should be tested on people?
- ☹ With the advances in science animal testing is an out-dated relic.
- ☹ 'Golden Rule' – would you like to be treated like this?
- ☹ 'Agape' – surely it cannot be loving to test products on animals?

The Uses of Animals by Humanity:

- Pets, livestock, conservation, help and companionship, food, transport, burden, entertainment.

Should we use 'Xenotransplantation'?

- A xenotransplant is the transplant of an organ to a different species.
- A species is defined by whether or not two separate animals can successfully mate. For example, a collie and a Labrador are completely different animals but can successfully mate as they are both of the same species.
- Xenotransplants are needed due to the fact that there aren't enough human organs available for transplant. There are several objections:
 - a) To harvest the organs we have to kill the donor. In some cases, specifically breed or engineer the donor.
 - b) We are introducing foreign DNA into the gene pool. What about diseases crossing species boundaries (e.g. HIV / AIDS).