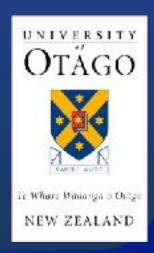
## Science, Ethics and God's Will: Approaches to Medical Technology

D Gareth Jones



## Background

Science-theology dialogue

Astrophysics, cosmology, evolution

Medical technologies affect daily living

No simple answers

Affect everyone

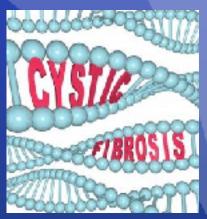
What implications for Christian witness and Christian theology?

## Cystic fibrosis (CF)

Recessive gene; both parents carriers

One in 25 people are carriers

25% chance of having child with CF



Mutations in gene encoding CF transmembrane conductance regulator (CFTR) protein

Breakdown in regulation of sweat, digestive fluids, mucus

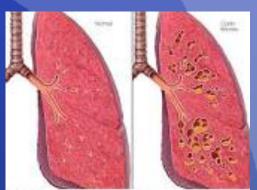
## Cystic fibrosis

Thick sticky mucus



Affects pancreas – digestion of food, poor weight gain, malnutrition

70,000 people world-wide



## Cystic fibrosis

No cure; chronic ill health

Genetic disorder - 1938

First drug approved – 1993



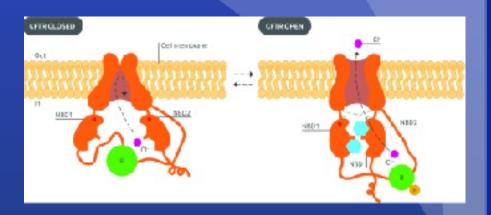
Increase in life expectancy with medical advances – late 30s

Treatment: antibiotic therapy; aerosols; extra food; vigorous exercise; disease advances with age; delay damage to lungs

## Cystic fibrosis

#### Vigorous research

- 1. Pharmacological
- 2. Correcting CFTR
- 3. Gene therapy



Optimism - CFTR modulator drugs: ivacaftor/lumacaftor - target 'broken' genes

## Face-to-face with medical decision-making

The parents begin to contemplate the birth of a second child

#### **Options**

 Decide against having another child; do not want to bring into the world another child with CF

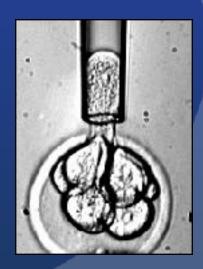
# Face-to-face with medical decision-making

2. Take a chance, and hope their next child will be unaffected. Continue the pregnancy whatever eventuates - the welfare of the child is in God's hands



# Face-to-face with medical decision-making

- Take a chance and have an abortion as a last resort if the fetus turns out to be affected – a morally tainted path
- 4. IVF and PGD (pre-implantation genetic diagnosis). Only unaffected embryo transferred; affected embryos discarded a very delicate and uncertain path spiritually



Option 1 (childlessness)

**Self-inflicted** 

Is this acknowledging that God is in charge?

Too much human control?



#### Option 2 (accepts what comes)

Perfectly acceptable, but not self-evidently the only or even the ideal way for Christians

- rejects some possibilities of scientific advance
- No explicit Scriptural warrant



#### Option 3 (abortion of affected fetus)

#### Most problematic

- severe negative repercussions for parents
- life-denying
- need to assess interests of all involved

#### Option 4 (use of IVF/PGD)

- financial costs
- invasive
- choosing one embryo over another; inevitably destroying embryos



## Comments on the options

#### Compromise

Will a child with CF be brought into world?

Will embryos be discarded?

Will a fetus be aborted?

Will another child not be born?

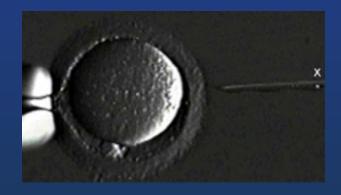
What is God's will?

## Comments on the options

How much reliance should be placed on science?

Availability of techniques like IVF/PGD cannot be ignored

What resources do Christians possess?





- protect the defenceless and disenfranchised
- importance of human flourishing
- our ultimate dependence upon God
- human life is not devoid of meaning simply because it is physically flawed

- transformative power of the healing that Jesus brought and that can be experienced today
- grateful for medical achievements bringing hope

**Uncertainty and ambiguity** 

The limited nature of human powers should never be downplayed

Framework for decision-making

Best interests of family, existing child with CF, future children, embryos?

No easy answers

Consequences of IVF/PGD route

(Genetic) technology makes certain things possible, but with this come inevitable ethical choices

Do we use technology at our disposal?

Control

Quality of life of CF individuals today is far better than 20-30 years ago

Dependence upon God

Dangers of technology/ignorance

Trust in goodness of God

Christian ethics as practices "not merely ideals, and not only rules or principles that ought to be done, but practices that are actually and regularly done, embodied in action"

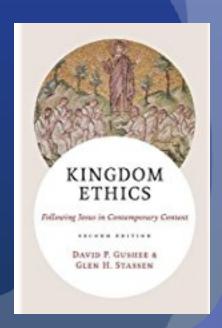
Live humbly; mourn what is wrong

**Surrender to God** 

Hunger and thirst for God's justice

Offer compassionate action, forgiveness

**Peacemakers** 



Looking after second child with CF

Example of rejection by one Christian community



Simple black-and-white answers may be profoundly misleading

Need to balance compassion with healing, living humbly with mourning at our proclivities to evil

All life is gift from God; to be enhanced if possible; value all humans as far as we can;

We are more than our genes

To reject perfectionism

We are not gods and not to act as though we were God



Provisional nature of what can be accomplished by humans; not to be downgraded

Created as relational beings

Support of community

Dependence upon Holy Spirit for direction and assistance

### Science, ethics and God's will

Multidimensional approach

Attention to science involved

Ethical principles etc tend to be theoretical

Practical outworking of one's thinking provided by one's character and relationship to God

Decision-making to take into account people involved

Come face-to-face with God

### Science, ethics and God's will

Demands will increase with gene editing, NIPT and whole genome sequencing

Availability of vast array of genetic information early in pregnancy

No easy answers

All Christians will not reach same conclusions



To support one another rather than judge each other

#### References

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