

## **Coronavirus vaccines and Christian ethics**

In September 2020 it was estimated that researchers were testing 40 different coronavirus vaccines in clinical trials on humans, and at least 92 preclinical vaccines were under active investigation in laboratory experiments. From a Christian perspective, perhaps we should first pause here and give thanks that God has given us, here and now in the 21<sup>st</sup> Century, the scientific knowledge, the human expertise and motivation and the financial resources to undertake this massive scientific enterprise for the good of humankind. There's little doubt that the entire field of vaccine development has been transformed for good because of the COVID-19 pandemic.

### **How are vaccines being developed?**

Different vaccines are being developed using a range of technological approaches. Some new-generation vaccines employ fragments of RNA or DNA which do not require the use of live cells in their production. However many of the vaccines in current development use live cells as an essential part of the development process. Several vaccines in current use, such as those for influenza and hepatitis B, are grown in non-human cell lines or chicken eggs. But human cell lines are thought to be especially useful when working with a new virus as they represent the closest analogue to what happens when the new virus meets the human body.

For many years biotechnologists have used what are known as 'immortal cell lines'. These are cell cultures which continue to grow because the cells keep multiplying indefinitely. The advantage of these unusual cell lines is that they can be very precisely characterised and their properties remain constant over years or even decades. However some of the frequently used cell lines are associated with complex ethical questions because of where they came from.

### **Where do cell lines come from?**

One specific cell line called HEK-293 is widely used for vaccine development because it's relatively easy to insert viral genes into the cells, which then produce large quantities of viral protein. The widely publicised Oxford University/AstraZeneca vaccine is being developed using HEK-293 cells, and several other manufacturers and research groups are using the same cell line. The problem is that the cells were obtained from a human fetus (unborn baby) who was legally aborted in the Netherlands in 1973. Another manufacturer is developing a vaccine using a cell line PER.C6 which was also obtained from a fetus who was aborted in the 1980s.

How should Christians who wish to show respect for all human life before and after birth respond to this? The Oxford University/AstraZeneca vaccine is currently undergoing clinical trials to test safety and efficacy and if they are successful the vaccine will be made widely available across the world. How do we balance the large numbers of lives that would be saved by an effective vaccine against ethical concerns about how it has been developed?

## **Human volunteers and vaccine development**

Before we look further at this difficult moral issue, I would like to draw attention to some of the other ethical issues which the race to develop coronavirus vaccines is raising. For instance, would it be ethical to infect healthy volunteers with the coronavirus in order to test how effective a particular vaccine is? Although COVID-19 infection is generally mild in young healthy people, we have no knowledge about longer-term complications and we do know that in a small minority of young people very severe complications and death may occur. What level of risk should we allow a person to take for the good of others, even if they are fully informed and give voluntary and un-coerced consent? Another ethical dilemma is whether, once a safe and effective vaccine has been developed, vaccination should be made compulsory by law. Would it be right to insist that no child can go to school before they have received the vaccine, or that every health professional should be compulsorily vaccinated?

## **Global justice and the distribution of new vaccines**

Perhaps the greatest and most challenging ethical issue coming down the line is how a successful vaccine can be made available across the world in a way that is just and equitable. At the moment rich countries are pouring billions of dollars of public money into the development of new vaccines. Once a vaccine has been shown to be effective there will be huge political pressures to ensure that it is available first to everyone in that country. But the inevitable result of this will be that billions of vulnerable people living in poor countries will miss out, leading to further avoidable deaths and economic misery.

If rich countries use all the available vaccine to protect only their own populations they will be extending the life of the pandemic everywhere. The Bill and Melinda Gates Foundation has recently published a [report](#) which stated that, according to modelling from Northeastern University, if rich countries buy up the first 2 billion doses of vaccine instead of making sure they are distributed in proportion to the global population, then almost twice as many people could ultimately die from COVID-19.

At the turn of the century, Christian voices were at the centre of a global movement for justice, the Jubilee Debt Campaign, which fought for cancellation of billions of dollars of unjust debts in low-resource countries in Africa and elsewhere. Will Christian voices be raised to fight for global justice and generosity in vaccine distribution? Or will this become yet another example of rich world selfishness, greed and abuse of 'widows, orphans and immigrants'.

## **Vaccines and the problem of 'cooperation with evil'**

To return to the issue of vaccines developed from the cell-lines derived from an aborted fetus, I think it's helpful to see this issue in the light of a wider category of moral dilemmas which Christians have struggled with for centuries. It's often been called the question of 'cooperation in evil' or 'cooperation with evil'. It's a recognition that by our very engagement in human society, we cannot avoid some degree of cooperation or complicity

with evil, in a fallen world. Some of the money that I pay to the UK Government in taxes is used for purposes with which I profoundly disagree. By working as a doctor within the NHS I was inevitably co-operating to some degree with activities and decisions that raised ethical questions. Even Jesus himself by encouraging people to pay their taxes to Caesar, and the Apostle Paul by appealing to Caesar's justice system, were in some sense cooperating with the very obvious evils of the Roman Empire.

Moral theologians who have wrestled with these problems have drawn distinctions between intentional and non-intentional cooperation, between active and passive cooperation and between proximate (or physically close) cooperation and remote cooperation. They have also stressed the importance of looking for alternatives to the evil and trying to balance the cooperation with evil against the morally good things that may result. Most thoughtful Christians have concluded that paying our taxes is a more ethical option than refusal to participate in society and going to prison(!) In this case the cooperation with evil is unintentional, distant and unavoidable.

### **Should we accept a vaccine that is 'morally tainted'?**

But how should we think about the vaccines for COVID-19? First, it makes a difference what role we play in the story. For instance, consider the ethical challenges for a Christian technologist working in a vaccine lab, or for a Christian pharmaceutical company executive making decisions about which vaccine candidates to invest in, or a Christian politician with responsibilities for public spending. Their ethical responsibilities are obviously different from those of a parent with young children who has no connection with the healthcare world. Clearly if I have a chance to influence decisions for good and away from evil then I have a responsibility to do so. And if I can't influence the decision then, for example as a Christian working in the biotech world, I may choose not to work on a particular cell line, and even resign my job out of conscience if I have no alternative.

But as a parent I may feel that it is better for my children to receive protection from the virus even if the vaccine is 'morally tainted', because the alternative of not receiving any protection is worse. Of course, if there is a choice to have an alternative vaccine which is equally effective but which hasn't been derived from a human fetal cell line, then this will be the preferable approach. And as a Christian community we can raise our voice with the Government to argue that alternative vaccines should be made available once they have been shown to be safe and effective. And we can support and pray particularly for Christian people in strategic positions in politics and healthcare who can influence decisions which impact millions of people.

### **The painful truth about abortion in 2020**

But from a Christian ethical perspective I cannot avoid the elephant in the room (to use an over-worked metaphor). How can we as Christian people express righteous indignation about the use of tissue from a single tragic abortion 50 years ago, if we remain silent about the more than 200,000 abortions that are happening in the UK in 2020? Are we at risk of what Jesus described as 'straining out a gnat and swallowing a camel'? The painful truth is that 1 in 3 women in our society will have an abortion in their lifetime and for every woman

there is a man who is equally involved. And all the evidence suggests that thousands of Christian men and women are also involved, although this is a reality which is rarely acknowledged or spoken about. I am not writing this to make anyone feel judged or uncomfortable. The message of the Gospel of Christ is that we are all guilty in different ways, we are all broken by past histories of evil and failure. But there is open to each of us a pathway of repentance, healing and restoration. That's the good news of grace and truth. As Jesus said to an anonymous woman surrounded by self-righteous accusers, 'I don't condemn you. Go now and leave your life of sin' (John 8:11).

### **A better way**

If we are rightly concerned about cooperation with the evil of abortion, perhaps this is where we should start – supporting organisations such as Christian crisis pregnancy centres which are providing skilled counselling and non-judgemental support for women considering or affected by abortion, and backing those who are standing up for the rights of unborn children in the public square. Whenever as Christian people we say that something is wrong, we must immediately go on and say, “....and here is a better way”.

So, to conclude, we live in a complex, interconnected and fallen world and some kind of cooperation with evil is tragically unavoidable. But we can use our voices and our actions to stand up for justice and for compassion, to make a difference in our world and to protect those who have no voices, the most vulnerable human beings in our midst.

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