

INTRODUCTION

Towards the end of what has been a grim year for many, good news of several effective vaccines emerging has been very welcome. What has been accomplished in less than a year is little short of miraculous!

Less welcome is the outpouring of misinformation and conspiracy theories from the anti-vax lobby. Whilst much of it is simply bonkers, some may appear credible, especially to those already sceptical about ‘truth decay’ and spin by governments or big pharma. The result is that a significant number of people are distrustful of vaccines in general and the prospective COVID-19 ones in particular. In the USA nearly half of the population say they would refuse to have the jab. Worryingly, some of that fear is being fuelled from pulpits.

In the UK, the mistrust is less widespread, but it is significant and may be growing. Given that a certain level of population immunity is needed to secure the health of everyone, we need to address these concerns.

1. WILL THE VACCINES BE SAFE?

Yes, they will. It is tempting to think that essential safety measures must have been short-cut in order to have developed vaccines so quickly. Or that the potentially huge financial rewards in being among the first to bring a vaccine to market will induce corrupt practices by pharmaceutical companies. Sadly, there have been examples of corner-cutting and corruption historically, and it is because of those very examples that effective safeguards are now in place. The responsibility for monitoring and assessment of the whole process is with independent bodies that are not involved in the research and do not stand to gain from commercial manufacture. These bodies scrutinise every step of the process, ensuring safety is paramount. Peer-reviewed, double-blind clinical trials mean that researchers cannot skew results. For a vaccine to come to the point of use, it has been found to do no harm to thousands of volunteers in Stage 3 trials. Any vaccine in use in the UK will have satisfied all such scrutiny. Can't speak for those coming out of some totalitarian states that refuse to release their data, but here...you can rest assured!

2. WILL THEY BE EFFECTIVE?

The percentages you have heard announced for the three, current front-runners refer to their effectiveness in preventing vaccinated people from getting a severe expression of the disease. A vaccine that offers even 70% protection is considered very effective – the annual flu-jab would be no more effective than this in most years. So, all three that have been in the news score highly in this regard.

What is not yet known is how long such protection might last. It's possible that booster doses may be required at intervals. More data over time will answer this question.

Also unclear at this stage is whether any of the current vaccines will prevent someone who already has the virus from spreading it. Some people can carry and spread the virus without themselves having any symptoms – so-called ‘super-spreaders’ – and it's not yet clear if vaccinating these people (assuming they can be found) will prevent them infecting others. Again, more data will answer this.

3. WILL THEY MESS WITH MY DNA?

No. A word or two about how vaccines work may be helpful here for some. When our bodies are infected with a virus we've never encountered before, it takes some time for our immune system to manufacture the specific antibodies to deal with that infection and, in the meantime, we may get sick. Just how sick depends on many factors, including the size of the dose, the virulence of the virus, our age and co-existent health issues. Vaccines work by giving us a tiny dose of dead or inactivated virus, that doesn't make us sick but does trigger our immune system, prompting it to manufacture antibodies and other cells (including so-called T-cells). If subsequently we are infected with that virus in real life, there is no time lag - our immune system is already primed for action and the infection is halted in its tracks before it can make us ill. Some people may still suffer minor symptoms, but most will experience no symptoms. Clever.

The Oxford University/AstraZeneca vaccine uses a virus that commonly causes 'a cold' in chimpanzees but has been modified so that it cannot multiply and cause symptoms in humans. The harmless chimp virus is then loaded up with the gene for the coronavirus 'spike protein', the club-shaped part that dots the surface of the virus and enables it to dock onto and penetrate human cells. When the vaccine is injected, the chimp virus delivers the coronavirus gene into human cells which start to churn out the spike protein. This, in turn, provokes the immune system to produce antibodies to the spike protein. The pump is primed.

Two of the vaccines in the news presently - the Pfizer/BioNTec and Moderna vaccines - inject miniscule amounts of synthetic 'messenger RNA' (that mimic part of the COVID-19 virus's genetic code) into your arm. It's a bit like injecting an instruction manual so your body is able to build a bit of the COVID-19 virus protein, which in turn prompts the immune response. The difference from the OU/AstraZeneca mechanism is that these vaccines don't rely on a cold virus to act as vector; instead they use mRNA made in a lab.

So, two different means to achieving the same end - a ready-for-action immune response mechanism. BUT vaccines do not modify your own DNA, and you will not have genetically modified children!

4. ARE THEY ETHICAL?

Some Christians have expressed concern over using vaccines prepared from human cell lines, specifically one cell line called HEK-293 that is being used in the Oxford University/AstraZeneca vaccine and by several other manufacturers and research groups working to produce COVID-19 vaccines. The problem is that the original cells, from which these cell lines are derived, came from a human fetus (unborn baby) who was legally aborted in the Netherlands in 1973. How should Christians who wish to show respect for all human life before and after birth respond to this? 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 derived?

There is no simple answer to this question, and we must respect those who come to a different conclusion from our own. In thinking through your own position, you will want to consider several factors, including:

- In a fallen world, some degree of cooperation or complicity with evil is tragically unavoidable
- The original abortion, fetal tissue from which produced the so-called 'immortal' cell line that has continued to replicate, took place 47 years ago. Does that remoteness in time have bearing on the ethical calculus? (It is not the case that further abortions will be needed in order to provide further cell lines for vaccine development.)
- Ends don't justify means but God is a redeemer - he has a track record of bringing good out of evil
- Over 200,000 abortions are still performed in UK annually. Would acceptance of a vaccine derived from this historic cell line condone the ongoing abortion industry?
- It looks as though there will be other vaccines available that are not prepared using this cell line

- Should individuals be permitted a personal choice of vaccine, on the grounds of conscience?

Like I say, it's tricky. I like what John Wyatt has to say about this:

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”.

Cell lines derived from the tissues of two or three aborted fetuses have been used over many years to produce various vaccines, including a number currently in use against rubella, measles, polio, chickenpox, hepatitis A, and shingles. They have undoubtedly saved countless lives. We may not have realised it at the time, but many of us agreed to our children receiving vaccines produced in this way.

Speaking for myself, I would be willing to receive the AstraZeneca vaccine. Whilst I understand and respect friends and colleagues who would not, and as much as I grieve the loss of so many pre-born lives and the pain and distress of abortion suffered by so many women and their partners, I would not myself feel 'guilt by association' nor in some way condoning of abortion by having the vaccine. Rather, I choose to see the good that the vaccines have accomplished as evidence of the redemptive kindness of our heavenly Father.

The UK government has pre-ordered 100 million doses of the AstraZeneca vaccine, a much greater number than for any other option, so it is statistically likely that you will be offered this one. If you would prefer to receive a vaccine produced in a different way (eg Pfizer or Moderna), on the grounds of conscience, do not hesitate to request it. There will be many others who feel similarly, and provision will surely be made available.

5. WHAT CAN 'I' DO?

- Thank God for the breakthroughs in biotechnology that mean we have weapons with which to fight this pandemic that previous generations never had
- Pray that many safe and effective COVID-19 vaccines will be produced so that there are enough doses available rapidly to meet global needs
- The world's richer countries have already bagged the first 2 billion doses of vaccine, pushing the poorer nations to the back of the queue. New modelling from Northeastern University shows that in this scenario, 'the virus continues to spread unchecked for four months in three quarters of the world. And almost twice as many people die.' Let's pray and lobby that vaccines are distributed to countries based on their population size, not on their ability to pay. In our global village, nobody is safe until everyone is safe. Pray for a wave of compassionate common sense to break over the governments of richer countries
- Don't give fear mongers and conspiracy theorists the oxygen of publicity, but be open to the thoughtful concerns and opinions of others
- Get vaccinated when your turn comes!