1. How dangerous is to get covid-19 vaccine?

All corona vaccines are well researched and based on <u>well-established science</u>.

The adverse events with corona vaccines are largely the same as with any vaccine. Sometimes the immune system gets too activated due to vaccination and may cause some side effects like local swelling of fever, but these are by far short term. Rarely vaccination may trigger a stronger autoimmune reaction, which may cause longer term fever, joint pains or organ symptoms like inflammation of the heart muscle (myocarditis). These symptoms are more likely to be caused by the natural infection that vaccination. Death after any vaccination is <u>extremely rare</u> and is always studied vigorously to establish whether the causality is real.

2. If I already had corona, do I have to do the vaccine?

The corona infection protects you only some months from the next corona. You can take the vaccine after 4-6 months of the corona infection.

3. Is it a difference between Pfizer and Moderna vaccines?

Moderna vaccination can rarely cause inflammation of the heart in males and is not given to boys/men under 30 years of age. The corona infection causes heart inflammation itself more often than the vaccine.

4. Is it safe to give vaccine to children?

The decision to vaccinate children is always based on safety studies, which show low rate of adverse events in children. The vaccination is always voluntary.

5. Is this vaccine created to destroy the humankind?

This comment is not based on current approved science and not true. The sources to look at are e.g. <u>WHO</u>, <u>CDC</u>, <u>ECDC</u>, <u>THL</u>.

6. I believe this vaccine will lead to genetic modification in my body, is this true?

In case you worry about the "new" mRNA vaccines like Pfizer and Moderna we can say this: The mRNA technology was not created for corona19, but is has been studied for years. The technology does not alter or even deal anyway with human genetic material, which is DNA. It uses mRNA to deliver the message to cells to start producing the spike protein for corona19, which then elicits the immune response in the body. Some call the vaccine genetic therapy, but that is not true because the vaccine is not even touching our genetic information.

7. What would you say to person who is scared to take the vaccine?

It is normal to hesitate with issues, that are new. There is a lot of wrong information published about the vaccinations. Vaccinations have averted millions of infectious disease deaths worldwide. Almost all doctors take vaccines and give them to their children. Why would we do it if we thought it was harmful? Instead, we believe in science and make informed decision. It is our duty to convince others as well on the life-saving medications. You would trust us to give you antibiotics, why not vaccines?

8. Will we need to get vaccinated every year?

We do not know this yet, but corona may become like influenza and require vaccination every year.

9. Is it true that vaccine against corona19 affects fertility?

Pfizer and Moderna vaccines have caused menstrual irregularieties, i.e. some womens' monthly bleeding may come on wrong times for some months. This has not affected in fertility in studies done.

Questions answered by Terhi Heinäsmäki

City of Helsinki Infectious Disease Doctor

