**Vaccinate against Covid-19**

**Introduction**

Most societies face a moral dilemma. Can people who do not want to be vaccinated because they are convinced of its ineffectiveness, because of conspiratorial ambiguities, or out of simple selfishness, be forced to undergo the vaccination? Does a minority have the right to prevent the majority from returning to a normal life? Should not the State then use its powers against it? But then the question arises whether a democratic state governed by the rule of law can afford such an interference with civil liberties.

There are 8 billion people in the world and most of them will have to wait. Vaccines will first be rationed. Health workers will be first in line, that is clear. But who's next? Some people think that prisoners should come second, because it is in and from prisons that disease spreads the most. This question affects all countries in the world (Christie [online], 2021).

Eventually, the question of whether the vaccine should be compulsory will be addressed. States can declare it, but mandatory vaccination can be required by employers, universities, vaccination cards can be required by theatres, sports stadiums, etc.?

The purpose of this essay is to introduce the reader to the issue of vaccination and to present different types of views on vaccination (Christie [online], 2021).

**Text of the essay**

**Introduction about Covid-19**

The coronavirus (SARS-CoV-2) pandemic is a powerful infectious disease that kills and disrupts lives even in the most technologically advanced countries. The early notification of the epidemic and its resolution allowed work to begin on a vaccine solution within weeks of the World Health Organization's first notification of the epidemic first detected in China on 31 December 2019 (Kim, Marks, Klemens [online], 2021).

Covid-19 is a pandemic that is relatively new and unprecedented in recent human history. Less than 18 months since the outbreak of the pandemic, there are nearly two hundred million confirmed cases worldwide and four million people have died, A great deal of work has been needed to find a safe and effective vaccine against this virus. By July 2021, 184 types of Covid vaccines were in development-and 18 of them had been approved for emergency use by at least one regulatory authority. These vaccines contain live attenuated or inactivated whole virus vaccination, etc. By mid-2021, three billion doses of Covid-19 had been administered worldwide. Vaccination with Covid-19 could end this pandemic (Ndwandwe, Wiysonge [online], 2021).

Vaccination is a much safer route against Covid-19 than a population immunity outbreak through natural infection, which is associated with a high risk of mortality and morbidity due to Covid19. Early vaccine experiences have compared very favourably with the effects of Covid-19 infection. For example, during the introduction of the Pfizer-BioNTech vaccine in the US, no deaths were reported after the administration of nearly two million first doses of the vaccine. This compares very favourably with the ratio of COVID-19 infection to mortality. There is also a significant risk of morbidity with Covid-19. It is estimated that approximately one in five persons infected with Covid-19 have symptoms for 5 weeks or longer. And one in ten people infected have symptoms for more than 12 weeks. However, with the invention of the Covid-19 vaccines came a dilemma, which faced a rapidly spreading third wave of infections in December, partly caused by the emergence of a new variant. This has caused considerable uproar among doctors who provide the vaccine, for a variety of reasons. Doctors are trying to do the best for their patients (Ndwandwe, Wiysonge [online], 2021).

The arrival of the Covid-19 vaccine has sparked a race among countries to vaccinate their populations in the hope of returning to normal life. Mass vaccination in countries may not bring safety as there is still a risk of re-importation of infection from lower income countries due to tourism. In an interconnected globalised world, the fates of us all are intertwined (Morling, Lee [online], 2022).

**Type of vaccines**

These are the vaccines available at the beginning of the pandemic. There were five vaccines. More vaccines are still approved and then awaiting distribution (Pilishvili [online], 2021).

1) Pfizer's Comirnaty vaccine. It belongs to the group of RNA-based vaccines. It is vaccinated in two doses. It is suitable for booster vaccination.

2) Spikevax vaccine from Moderna. It belongs to the group of RNA-based vaccines. It is vaccinated in two doses. It is suitable for booster vaccination.

3) Vaxzevria vaccine from AstraZeneca. It belongs to the group of vector vaccines (they work based on viral carriers. It is not used for revaccination

4) Janssen vaccine from Janssen Pharmaceutica. It belongs to the group of vector vaccines. It is single dose only and is not used for re-vaccination.

5) Nuvaxovid vaccine from Novavax. The last approved vaccine, for distribution from the end of February 2022. It is a protein vaccine, and two doses are required (Pilishvili [online], 2021).

As soon as the vaccination started, various warning articles began to appear in the media. For example, that vaccination causes thrombosis in some people. This happened after a vaccination with Johnson & Johnson's covid-19 vaccine, which started with headaches and back pain. The condition of an 18-year-old American woman from Nevada worsened, culminating in blood clots in her brain that put her in a coma and forced her to undergo three neurosurgical operations (Pilishvili [online], 2021).

Thromboses, unwanted blockages of blood vessels where blood is supposed to flow freely, are extremely rare after covid vaccination: one to two in a million people vaccinated with the Johnson & Johnson vaccine, and about ten in a million with the AstraZeneca vaccine (Lancker [online], 2021).

It is therefore much less risky to have the vaccination than to avoid it because of fears of thrombosis. On the other hand, thrombosis after vaccination can kill a healthy person who just wants to protect themselves against a potential danger. And with the number of doses of all vaccines already over a billion worldwide and continuing to climb steeply upwards, even an extremely rare disorder is threatening more and more people.

The question that every citizen has asked: is vaccination safe? (Lancker [online], 2021).

Every vaccination is an attack on the immune system and can lead to adverse effects. All side effects should be reported. In our country they are recorded by the State Institute for Drug Control. However, with the covid-19 vaccination, experts point out that the benefits far outweigh the risks.

There are also concerns about the accelerated development of vaccines. "I consider this a triumph of science and the whole organisation around it. Everybody has come together to ensure that it has been this fast. But nothing was neglected. The number of people on whom the vaccines have been tested is even higher than usual (Lancker [online], 2021).

The most common side effects are fatigue and headaches. For example, after vaccination with the BioNTech/Pfizer vaccine, fatigue occurred after the second dose in about 60 percent of people, headaches in more than half, and muscle pain in less than 40 percent. Redness and pain at the injection site or short-term tingling of the limbs is common. Similar mild discomfort is described for all certified vaccines (Lancker [online], 2021).

**First dilemma: Who will be first?**

Europe has had a vaccination dilemma since the beginning of the pandemic. Many European countries started vaccinating children and adolescents in June, even though many poorer countries have not yet even vaccinated their health workers (Painter [online], 2021).

In India or Brazil, meanwhile, tens of thousands of infected people are being infected and the countries are becoming breeding grounds for new mutations. Meanwhile, Member States are busy planning vaccination campaigns for children and adolescents. Indeed, the EMA has announced that Pfizer's vaccine is safe for the 12 to 16 age group.

While individual European countries argue about whether and when to start vaccinating children, for low- and middle-income countries such considerations are a distant dream. Kenya has not even administered one million doses yet, and Nigeria, with two hundred million, has only just passed the two million marks (Painter [online], 2021).

But other experts say it is not such a simple decision. The logistics around rolling out vaccination campaigns or the expiry dates of individual vaccines are also at play. Moreover, scientists disagree on how important it is to vaccinate children (Painter [online], 2021).

Based on the research so far, it appears that children are much less likely to have a serious course of covid-19 disease or to die from the infection. On the other hand, there are cases of children who develop severe multisystem inflammatory syndrome after becoming ill. Moreover, even among children, there are individuals who, like adults, are among the higher-risk patients (Painter [online], 2021).

Every country wants to vaccinate all its inhabitants to be safe, but this is not an infection that affects only some countries, it is a global pandemic. 100% immunisation of selected countries is therefore not the solution (Painter [online], 2021).

The old continent has already joined in supporting the affected countries. The European Union has pledged to donate 100 million doses (Painter [online], 2021).

**Second dilemma: Vaccinate or not?**

Society is mainly divided on the vaccination against Covid-19 and the two main currents of opinion are also evident in the media. One argues that as the population is vaccinated, the number of cases of infection decreases. On the other side are people whose health problems have worsened after vaccination. There have been thousands of protesters in European cities who are furious about the anti-coronavirus measures. They believe that the vaccination will cause more harm than the virus itself and believe that the Covid-19 pandemic is a mere fabrication (Macis [online], 2020).

Another question is whether to get vaccinated if I have antibodies to Covid-19. But finding antibodies to SARS-CoV-2 in the blood is not a reason not to get vaccinated against Covid, experts agree. In fact, no one yet knows how high levels of antibodies protect against the disease and what levels do not. The data show that the most effective protection is for those who have been vaccinated and have had Covid-19 (Macis [online], 2020).

**Third dilemma: Booster?**

Almost three million people in the Czech Republic do not have the third dose of the anti-covid vaccine. Citizens are postponing the third dose of the vaccine or have not yet received it because they have contracted covid. The Ministry of Health recommends getting the vaccine no earlier than three months after contracting the disease. According to the ministry, people should get the third dose now (Shekhar [online], 2021).

The Ministry of Health strongly recommends a third, booster dose. At the same time, he stressed that protection against Covid-19 after vaccination decreases over time. According to data from the Czech Institute of Health Information and Statistics, the effectiveness of completed vaccination drops to 60 percent after about six months. After another three months, it can drop to below 50 percent. A third, booster dose, on the other hand, returns an effectiveness of over 90 percent (Shekhar [online], 2021).

People who have only two benefits have a low and decreasing level of protection. A third benefit will increase this protection significantly. The new SARS-CoV-2 coronavirus, with its existing variants, is not yet sufficiently adapted for seasonality, as is the case with traditional viral agents of acute respiratory diseases (Shekhar [online], 2021).

**Conclusion**

I believe that in times of pandemic, a careful assessment should be made of how well each of these conditions is met. It is difficult to determine when the moment has come for society to make it an enforceable obligation for individuals to be vaccinated. Evaluating the conditions requires responsible discernment at the professional and societal levels, capable of responding flexibly to the state of play. However, we should still not give up trying to persistently encourage the freedom of the individual to see vaccination as a responsible exercise of goodness towards oneself, one's loved ones and the weakest and most vulnerable.

It is everyone's decision whether to get the Covid-19 vaccine. In this situation, the government can certainly make life difficult for those who oppose vaccination in various ways. For example, by withdrawing the provision of some free tests and hoping that paid and compulsory testing will make people go for vaccination instead. There have also been suggestions for stricter procedures - such as making vaccination a condition for certain professions. Others, on the other hand, stress that it is more effective to come with positive motivation.

I would like to hear and read discussions by legal theorists, ethicists, political philosophers, and journalists. I am not so much interested in their opinions, which I am familiar with, but in the precise arguments for the solutions they recommend. In a pandemic, we have heard the voices of doctors, epidemiologists, microbiologists, virologists, statisticians, and other natural scientists. We would need to get a handle on the problems that they clearly do not know how to deal with; without their good advice, the government is in danger of acting as it has been, and therefore in a very confused and indecisive manner (Riad [online], 2021).

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Petra Bernická, M210139