

Summary of Meeting

Virologist -Geert Vanden Bossche, DVM, Ph.D., is an international expert in vaccine development and a global director of a number of vaccine programs. Vanden Bossche received his DVM from the University of Ghent, Belgium, and his PhD degree in Virology from the University of Hohenheim, Germany. He held adjunct faculty appointments at universities in Belgium and Germany. After his career in Academia, Geert joined several vaccine companies (GSK Biologicals, Novartis Vaccines, Solvay Biologicals) to serve various roles in vaccine R&D as well as in late vaccine development. Dr. Vanden Bossche then moved on to join the Bill & Melinda Gates Foundation's GH Discovery team as SPO and later on to work with GAVI as Senior Ebola Program Manager; he subsequently joined the German Center for Infection Research as Head of the Vaccine Development Office. He is now primarily serving as a Biotech/ Vaccine consultant while also conducting his own research on NK cell-based vaccines. His work is driven by a relentless passion to translate scientific breakthrough findings into competitive vaccine products. As a creative thinker, innovator, entrepreneur and visionary, Dr. Vanden Bossche has been invited to speak at multiple international congresses.

Summary of Major Points

When there is an infectious disease circulating in a population, and when a number of people have been vaccinated against the disease, in this case the virus Covid-19, there is something called evolutionary pressure that causes the development of mutations of the virus. Although this is a bit complicated, it is important to understand how this works.

The vaccine causes the person vaccinated to develop antibodies to the Covid-19 virus. These antibodies live in the person's body, and when the person gets Covid-19 they attack and try to destroy the virus cells. An effective vaccine will destroy most of the targeted Covid-19 cells, but not all of them. This is because as the Virus infects the body it replicates, but this replication process is not perfect. Slight errors in replication produce what is known as "mutants" which are slightly different than the original Covid-19 virus cells. This is how the Delta variant, the Delta Plus variant, and other variants occur. The vaccine cells are not a perfect match for these mutations or variants, and although they attack the virus cells, they

cannot destroy them. However, they do interfere with the natural immunity of the person's body and here is where the problem occurs. Let us understand this.

Each person has a natural immunological system that protects each cell in the body from attacks from various sources. This could be from a viral or bacterial infection, an injury like a cut or burn, or other things. A normal immune system uses various cells to protect the body. These include macrophages, leukocytes, white blood cells, B-cells, T-cells and others. Some of these cells "eat" the virus cells to destroy them. Others wrap themselves around the virus cell and use chemical processes to disable them and destroy them. This system is what is known as **natural immunity**. When a person gets Covid-19 his natural immunity will cause his macrophages, leukocytes, etc. to attack the virus cells. In the vast majority of cases the virus will be destroyed and the person will recover. In some percentage of cases, the body's natural immune system will not be strong enough to kill the virus, and the virus can cause disability or death.

When a person is vaccinated, the vaccine causes the body to manufacture a specific type of cell that matches the particular virus. In the case of Covid-19 it is a spike protein virus. The cells that the vaccine stimulates the body to manufacture, called **antigens**, wrap themselves around the spike protein that invades the body when the person gets Covid-19 and tries to kill it. The problem occurs when a mutant strain of Covid, like Delta, infects the person. The antigen that attacks the mutation is not a good match for the mutation and can't kill it. What about the natural immunity that we just discussed? The problem is that the antigen although it can't kill the virus, does recognize the spike protein and will wrap itself around the protein and attack it. The natural immunity cells are therefore not able to get to the virus cells to attack it. In effect, the natural immunity of the body is disabled by the vaccine. What now happens is that the mutant variants become stronger since the vaccine does not destroy these cells, and the natural immunity that would normally kill the virus is disabled by the vaccines.

When many people are vaccinated the **viral pressure** from the mutant strains will become stronger and stronger. If there are enough people who are not vaccinated then the natural immunity will fight these strains and they will eventually be wiped out. If too many people are vaccinated, the new virus's will become uncontained since neither the vaccine can destroy them nor, in vaccinated

people, can the natural immunity be used to fight them. Dr. Vanden Bossche analyzed the data from several countries, including the UK and England, and demonstrated that this is what is happening now, and accounts for the data that show the more we vaccinate, the more cases of Covid we see, particularly in the vaccinated. This is causing rising levels of severe sickness, disability, and deaths.

When discussing the issue of vaccines in children, Dr. Vanden Bossche pointed out that the immune systems of children are very strong and powerful next to adults. Children have powerful innate antibodies that are extremely effective and can therefore have a **sterilizing effect**. He then brought out two points. First, if we look at the question of how vaccines affect individual children he explained that children very rarely get Covid, and when they do, they frequently have no symptoms or only mild symptoms. The mortality rate among children is extremely low, less than 99.998%, which is less than 2 in 100,000 cases. The side effect and death rates of the vaccine in children on the other hand, is far higher, and according to the Government data, the VAERS system, there have been ----- cases of serious disability and ---- deaths that have resulted in children over the age of --- from the vaccines. So from an individual perspective children should not be vaccinated.

Dr. Vanden Bossche's second point is that when you consider the public health question, vaccinating children will remove the best protection we have from another pandemic developing from Covid mutants. The children's powerful immune system will have a sterilizing effect on the virus mutants, in effect soaking up the mutant variants. This reduces the **virus pressure** and will therefore protect society as a whole from another pandemic.

We can now understand Dr. Vanden Bossche's major concern: If too many people are vaccinated, **and we are now at that point**, and especially if children are vaccinated, this will result in our protection from another pandemic caused by mutant viruses, to be removed, and can easily result in a worldwide catastrophe.