

Over the last week, we have been sharing compelling information on how Covid-19 can take advantage of suboptimal S-specific antibodies (Abs) to evade the host immune system. The virus will only exploit this opportunity when the immune pressure raises to a point where its replication is jeopardized. As previously explained, Covid-19 will implement this 'escape' strategy when its replication becomes severely hampered, e.g., due to stringent infection prevention measures (hence why we're now dealing with an increasing number of highly infectious variants). Mass vaccination will dramatically increase immune pressure on the virus while opening additional emergency exits. Because of enhanced infectiousness and spread of Covid-19, the virus will, indeed, increasingly infect subjects whose Abs are suboptimal (because too low in concentration and/ or affinity). Suboptimal Abs enable the virus to select mutations capable of strengthening its binding to the ACE2 receptor, thereby enhancing its infectiousness and eventually allowing ACE2 to outcompete vaccinal Abs for binding to its spike protein (resulting in viral resistance to the vaccines) .

For those who may have some difficulty in understanding how mass vaccination drives viral immune escape, it will suffice to watch infectivity and morbidity rates in those countries who have now succeeded in vaccinating millions of people in just a few weeks (e.g., UK, Israel, USA). Whereas these countries are now enjoying declining infectivity rates, they will undoubtedly start to suffer from a steep incline in Covid-19 cases in the weeks to come. The steep decline we're seeing right now may be followed by a short-lived plateau but a subsequent steep incline of (severe) disease cases is inevitable.

Unfortunately, it's only when the world will witness how morbidity and fatality rates start to dramatically increase despite ever growing vaccine coverage rates that health policy makers will finally realize that things are going in the wrong direction. Only then will the disastrous consequences of mass vaccination campaigns become obvious to WHO and our political leaders. Unfortunately, this may still take another couple of weeks. The price to be paid for the loss of this precious time is just beyond what one can imagine.