JOHN PAUL II MEDICAL RESEARCH INSTITUTE

Updated August 16, 2021

Vaccine Mandates and Passports Represent a Medically Futile Public Health Measure to Contain COVID in Catholic Institutions - Part 2: The Efficacy is Overstated and the Safety is Understated By Alan Moy, MD

by Alan Moy, MD

Founder and Scientific Director of John Paul II Medical Research Institute

False Sense of Immune Protection from the Vaccines

Moderna reported that their mRNA vaccine elicited transient neutralizing antibodies. However, these antibodies declined by 50 percent after 3 months for patients between the ages of 55-70 and declined by 75 percent for those over the age of 70. Moreover, T-cell immunity was only documented in healthy, non-elderly individuals. It has been well documented that long-term smoking, obesity, diabetes, and advanced age impairs T-cell immunity or fails to activate T-cell immunity in response to vaccines. Thus, individuals who possess any of these risk factors may elicit a modest humoral immune response and/or fail to achieve T-cell immunity – providing a false sense of security whereby such individuals may be no more protected than an unvaccinated individual. Moreover, these vaccines do not provide respiratory mucosal immunity which can still permit nasal transmission.

The primary endpoint of COVID-19 vaccine clinical trials was a reduction in <u>symptoms</u>. The clinical trials did not evaluate viral transmission. In fact, reports showed that viral particles <u>were still present</u> in respiratory secretions based on animal studies performed using mRNA vaccines and adenoviral vaccines. Therefore, the personal decision to take a COVID injection provides neither absolute assurance to the public that they are protected, nor will it prevent the transmission of the virus.

It is Difficult to Achieve Herd Immunity with Subunit Vaccines

Herd immunity refers to a level where a critical fraction of the public has achieved immunity against a viral infection to the extent that viral transmission ceases. At herd immunity, there are few remaining individuals that are vulnerable to infection. Public health institutions like NIH, CDC and WHO purport that herd immunity can only be achieved when at least 70 percent of the population has been vaccinated. However, this public health opinion is fallacious for several reasons. First, our government is discounting the fraction of the population that achieved natural immunity, which is currently hypothesized to be at approximately 30 percent. Second, herd immunity models assume that the vaccine is very effective. This is difficult to achieve with a

JOHN PAUL II MEDICAL RESEARCH INSTITUTE

subunit vaccine that elicits a weak immune response that requires boosters. There is little evidence that these vaccines stop transmission because of lack of respiratory mucosal immunity. Third, herd immunity assumes that humans are the only reservoir for the virus. This is not true for respiratory viruses which are impacted by animal reservoirs. Fourth, achieving herd immunity assumes that the virus is static and is not changing. However, as previously discussed, COVID-19 is a RNA virus that is dynamically changing and producing variants that genetically differ within the spike protein. The incidence of new cases was already on the decline before the vaccine rolled out according to CDC data. Additionally, the rate of decline of new cases was unaffected by the roll out of the vaccine. This suggests that there was sufficient background natural immunity to reduce the incidence of new cases or the virulence of the infection was decreasing. Since individuals that acquire natural immunity have redundant respiratory mucosal, humoral and T-cell immunity, there is a lower chance for the emergent of variants that will overwhelm healthcare resources. Taken together, rather than mandating vaccination for college students and school children, natural immunity would be a more effective and safer route for this age group to contribute to herd immunity. This would permit them to conduct their normal lives and acquire natural immunity, especially since this population has a high recovery rate and milder presentation of the illness. Their natural immunity would further reduce the emergence of variants.

The Vaccine Offers No Benefit but Poses the Greatest Health Risk to Young and Healthy Individuals

It is the standard of care to evaluate the risks versus benefits of any medical treatment. For example, healthcare professionals encourage but do not mandate pneumonia vaccinations for the elderly who are at increased risk from developing pneumonia. We typically do not vaccinate healthy 18 through 30 year olds with the pneumonia vaccine even though the vaccination has proven safe. Yet, there has been an absurd and obsessive effort to vaccinate children and college students where the risk of viral transmission in the former is extremely low and the risk of death from COVID-19 is essentially zero in these age groups. Moreover, many college students have recovered from COVID-19 and have developed natural immunity. As reported by a study from the Cleveland Clinic, the vaccine offered no additional benefit to those individuals who already recovered from COVID-19. Consequently, these experimental vaccines offer no benefit to children; college students; and young and healthy individuals working in hospitals. In contrast, gene therapies pose significant health risks.

A gene therapy operates by delivering a gene into a cell and/or tissue of interest and where the gene is converted into a protein, which in turn, mediates some specific biological activity. Gene therapy has historically been reserved for treating rare genetic diseases and refractory cancers. Prior to COVID, there has been no approved use of gene therapy to vaccinate against an infection. In the case of these gene therapies, the spike protein gene is delivered to specific immunological cells, where the protein is then expressed on the cell surface. These immune

JOHN PAUL II MEDICAL RESEARCH INSTITUTE

<u>cells then present the spike protein</u> to other immunological cells, which elicit systemic humoral and T-cell immunity. Unfortunately, the gene therapy also expresses the spike protein on unintended targeted cells (e.g. brain, heart, reproductive organs and vascular cells).

Spike proteins produce multiple mechanisms of concern that reduce safety, but there are three mechanisms of importance: (1) spike protein toxicity; (2) autoimmune responses; and (3) antibody development enhancement (ADE). First, the spike protein freely circulates in the bloodstream and activates any cell that expresses the ACE-2 receptor. Platelets and endothelial cells (cells that line the wall of blood cells) express ACE-2 receptors. Circulating spike proteins activate these vascular cells. Activated platelets tend to aggregate and adhere to activated endothelial cells which are sticky. These actions promote blood clot formation. Additionally, activated endothelial cells become leakier, which could lead to the extravasation of fluid and blood into tissues. Second, spike proteins are expressed in undesired tissues. The patient's immune system would not be able to differentiate between a virus expressing spike protein and an individual's own tissue that expresses the same spike protein. Under this condition, an individual who has acquired natural immunity could provoke an acute or chronic autoimmune response. Additionally, individuals who acquired natural immunity could be more susceptible to bleeding and thrombosis because their vascular cells are re-challenged with circulating spike protein from the vaccine. In the case of ADE, there is the potential that the antibodies produced from the vaccine could enhance the infection rather than provide protection. Thus, the vaccine offers a very unfavorable risk versus benefit scenario for children and college students, particularly if they had previously recovered from COVID. In contrast, high risk Catholics may have a more justified risk versus benefit scenario, provided that those individuals are fully informed of the moral issues and medical risks and benefits of these experimental vaccines.

According to the CDC's Vaccine Adverse Event Reporting System (<u>VAERS</u>), which is a passive reporting system that is said to report only a tiny percentage of the true incidence of adverse events, there have been over 15,472 deaths and 1.5 million injuries from the injections in Europe. In the United States, the injections have led to more than 6,113 deaths, 5,172 permanent disabilities, 6,435 life-threatening events and 51,558 ER visits. Individuals are required by law to receive informed consent before they receive an experimental vaccine under the National Research Act of 1974. While the government is pushing mass vaccination, it is interesting that approximately half of the employees at NIH and the CDC have not been vaccinated.