

A Discussion with Dr. Jay Bhattacharya
Transcript Completed by: Senior Editor Natalie Bodnar

Concordia University Wisconsin welcomed Dr. Jay Bhattacharya to its third annual Liberty, Faith, and Economics Summit in November 2021. Dr. Bhattacharya serves as Professor of Medicine at Stanford University, Senior Fellow at the Stanford Institute for Economic Policy Research, and Professor of Economics. He holds an MD and PhD in economics from Stanford University and has published over 130 peer-reviewed studies.

To highlight what he thought was a sensible public health response to the COVID-19 pandemic, Dr. Bhattacharya first explained the important lessons learned from his prior research experiences. He shared, “In March of 2020 when COVID hit, I had done work on H1N1 in 2009, and I noticed in that literature...the early estimates of mortality from the H1N1 flu epidemic of 2009 were catastrophically high...5% case fatality rate...people were obviously very concerned.” He added, “There were these studies that came out that measured how many people in the population had H1N1 infection...there was almost 100 times more people infected than were identified as cases.”

Bhattacharya described that a 99.99% survival rate transformed H1N1 public policy and proposed that a similar transformation should have been considered by the U.S. government during its initial response to the COVID-19 pandemic. In fact, Bhattacharya affirmed that the World Health Organization’s (WHO) estimate of a 3% COVID-19 mortality rate was an exaggerated—and therefore misleading—rate. Referencing two large seroprevalence studies completed in Santa Clara County and Los Angeles County, Bhattacharya shared that there were 40 to 50 times more COVID infections than reported cases, reflecting both a 99.8% survival rate and a 0.2% infection mortality rate. “This was extremely controversial at the time,” Dr.

Bhattacharya added, “but now there are almost 100 of these studies that have found almost exactly the same thing outside the nursing homes: that this is a 99.8% survival disease.” Dr. Bhattacharya further explained a sharp age-gradient mortality risk: “Older people are at much higher risk of COVID death than younger people. For young people...[particularly] children...there are many more threats...that are much more severe...than COVID. Whereas for older people, this is a very severe disease.” Dr. Bhattacharya published two peer-reviewed studies investigating this infection mortality rate—one in *The Journal of the American Medical Association*¹ for Los Angeles County and the other in the *International Journal of Epidemiology*² for Santa Clara County. He emphasized that this “0.2% is not a controversial fact [but]...is very well-established.”

Bhattacharya further detailed past traditional epidemiological policy for pandemics, which “emphasized identifying the vulnerable and protecting them, and then again, disrupting society as little as possible.” Because the harm from disruption is so great, he stressed that pandemic policies should avoid panicking the population while also protecting activities critical to a functioning society. He reflected, “Instead what we did, is that [we created policies as though]...there were no particularly vulnerable populations, that everybody was equally vulnerable, and that we lock down. If you’re thinking how to assess this—really, there are only two [scientific] facts you need to know.” He emphasized the importance of first, identifying the vulnerable and then second, evaluating the effectiveness of lockdown policies by determining their unintended harm. He added, “The scientific evidence for that second [component] was overwhelming at the time and is overwhelming now.”

“A lockdown is a policy designed to keep people apart from one another. The theory is that if you keep people apart, then [individuals] can’t spread disease to one another. The practice of lockdown actually isn’t that. The practice of lockdown is that a certain class of society is served and keeps itself separate while the rest of society serves it. The practice of a lockdown involves designating a certain class of people as essential [who are told that] no matter what [the] risk, you go work...[and] go get exposed to the virus, while the other class of people—less than 30% of workers in the United States—can safely work from home without actually having to lose their jobs. That’s the actual practice of a lockdown. So the lockdowns can’t be effective. They will not stop the spread because in practice, vast numbers of people can’t lock down. Otherwise they can’t live. This was even more acute in poor countries where less than 5% of workers could actually work safely from home.”

Dr. Bhattacharya further described the harms of lockdown policy. “In March of 2020, if you questioned or mentioned the existence of harms from lockdowns, you were shot down. I know this from personal experience.” The harms, he shared, were primarily economic but affected every aspect of society: 100 million people worldwide suddenly facing poverty and earning an income of less than \$1 per day; 80 million people struggling with dire food insecurity and hunger; 250,000 children in South Asia dead from hunger and the economic dislocation of lockdowns; enormous psychological harm with 1 in 4 young adults seriously considering suicide; people skipping cancer screenings and faltering in their diabetes management; people with heart attacks staying home. Dr. Bhattacharya related that “these are not simply economic harms but harms to health, psychological well-being, and...to the poor around the world...we knew [this] would happen in March of 2020.” He concluded that these are “not controversial numbers.”

He continued, “My first reaction to lockdowns is that we should not do it. It is an unethical policy that could not possibly work and would end up harming many more people than it could possibly help.”

Referencing March of 2020, Bhattacharya emphasized that “looking at...data [from] China and...Italy, [we knew] that [the elderly] faced the greatest risk. To date, 80% of the deaths are people over 65. We knew that in March of 2020. [From the Italy study] we also knew that nursing homes...and places where older people congregated were places of severe risk...we should have known [to protect them]...instead, in March of 2020, [people] thought the constraint was hospital beds. We were very scared that hospital beds would run out all across the country. And so what we did in many states was we moved [older] COVID patients from hospitals to nursing homes, causing much of the death in March of 2020. We panicked. As a result of that panic, many people who didn’t need to die, died...we were conserving the wrong thing. It was a mistake in not looking at the data carefully and not learning...in economics, we [identify] the real constraint and try to work around that...because we picked the wrong constant many people died...the real constraint is protection of the vulnerable.”

This approach of protecting the vulnerable and leaving the rest of the country to its own discretion was embodied in an October 2020 document called the Great Barrington Declaration. Bhattacharya explained, “The Great Barrington Declaration was a policy proposal that I wrote along with Professor Sunetra Gupta...and Professor Martin Kulldorff...the [ideas] behind [it are] first and most importantly, focused protection of the vulnerable—[to] move heaven and earth to protect the old...[and to appreciate] on the other hand [that] for young people, the harms from the lockdown vastly outweighed the harms from COVID. It was immoral to ask [young people] to bear the burden of the disease.”

Almost 1 million people signed this Declaration, Bhattacharya shared, “including tens of thousands of doctors and epidemiologists. The [mainstream] position is not actually the mainstream among epidemiologists and doctors: [many] are deeply uncomfortable with the lockdown policies we have followed...at the same time many people who are in the mainstream reacted negatively to [the Great Barrington Declaration]. [The document] was called ‘irresponsible...nonsense’...and...characterized...as a ‘let-it-rip policy.’” Bhattacharya stressed that “this [response]...was a piece of propaganda in order to not debate the lockdown policy.” He emphasized that “there is a middle-ground [strategy]...that [has been successfully] followed for a hundred years [in] epidemics: identify the vulnerable [and] move resources to protect them while disrupting the rest of society as little as possible.” As a result, Bhattacharya relates that we have created “institutionalized hypochondria” and that the Declaration became “a political thing” because “red states adopted something like the Declaration and blue states kept up with the lockdown policy.”

Given that science is about exploration and humility, this lack of civil discourse affects progress by creating negative implications for those pursuing Truth. In response to being discredited for not supporting the mainstream position on COVID-19 lockdown policies, Bhattacharya revealed that many of his colleagues questioned his motives. He relates, “It became personally clear to me that if I am going to have any integrity whatsoever in terms of my professional life, I had to speak up about lockdowns. I had prepared my entire life essentially for this it turns out...I had [also] been preparing to lose many of my friends. It’s been personally quite challenging...[but] it’s not just me. Almost anybody who spoke out with credentials about the lockdowns was discredited...you’ve heard people say that the right credentials involve

epidemiology, virology, and immunology—that’s it. No one else has a right to speak; no one else has any relevant expertise...that is a lie...this is a policy that affects every single one of us in intimate ways.” He concluded that “this is a disease and an epidemic that requires the expertise of everybody. Instead what happened was that people who started to speak up with different expertise were shot down. They were told they do not understand the disease and they therefore do not have the authority to speak...that was an enormous mistake made by the media, by politicians, and enforced ruthlessly through the whole epidemic. And I found myself in a very strange position...I felt that I had [to speak up].”

To address the two competing systems of norms for ethical scientific behavior, Dr. Bhattacharya described the first system, saying, “Science absolutely depends on people being able to freely speak their minds...on hypotheses that are controversial. Almost all of science is filled with results that most people didn’t believe at one point.” He added, “For science to work, we have to...give room for heretics and let heretics think what they think.” Bhattacharya affirmed that, “free expression of thought and ideas is an absolutely vital input in science. When we don’t have that, science is dead.” In fact, Bhattacharya shared that one of his colleagues declared the Age of Enlightenment over since the start of the pandemic, due to this lack of free civil discourse in science.

Bhattacharya also described the second system for ethical behavior as one of public health, sharing that “in public health, it is irresponsible...to contradict the mainstream narrative...it deserves condemnation.” He elaborated that “the ethical basis of that norm is that there is a deep...scientific consensus...for suppressing [an individual saying anything contradictory]. We applied the ethical norm of public health to a situation with a novel virus that required vast inputs of huge numbers of people with different expertise long before we actually

had any consensus on it. The consequences of that have been devastating...many of [the scientists who signed the Great Barrington Declaration] lost their jobs.” He continued, “If you’re an infectious disease research scientist or immunologist, you get much of your money from the National Institute of Allergy and Infectious Diseases...many scientists derive their living from funding from the NIH [National Institutes of Health]. It is an act of bravery to speak up [against these institutions]...the consensus as you see it is not actually consensus: it involves many people who censor themselves because they were afraid they would lose their research careers if they spoke up. Many people have actually lost their research careers for speaking up. We applied this public health norm of uniformity in messaging when the ethical basis for it did not exist.”

Reflecting on the public health stance of early 2020, Bhattacharya continued, “Once you suppress the debate, there is no lifting of that. You still see that today...in...[times] of uncertainty, scientific debate is needed more than ever—free and open exchange of ideas is needed more than ever especially when there is a pandemic. There is a cost to that: people will say things that are wrong; others will believe them...but [here] we have suppressed the debate before it even happened.” Bhattacharya also described the public health concept of precautionary principle in which scientists assume “the worst about the virus.” He elaborated that it “is completely reasonable...to calibrate what your response is going to be. What’s not reasonable is [simultaneously] assuming that the responses...you are proposing are automatically the best...or that [lockdown] interventions have no harm.” He further warned that “the loss of trust in public health is near complete...the work of science depends deeply on public trust.”

In response to early treatment protocols and physicians being able to prescribe off-label, Bhattacharya said, “The economics of this is really interesting. If you have a drug that is off-patent, there is nobody interested in testing it. So ivermectin is a drug that’s incredibly cheap

given billions of people around the world with river blindness and a whole host of other parasitic diseases [take it].” He described a thought experiment to the audience, proposing that “some scientists come up with the hypothesis that [ivermectin] works for COVID [treatment] and they have some in vitro studies...that suggest [ivermectin] might be useful...same thing with hydroxychloroquine...[with these] early hypotheses.” He elaborated, “Hydroxychloroquine is another drug that is used for malaria intervention and treatment around the world...somebody comes up with the hypothesis that [these drugs] ought to work [for treating COVID] but there is nobody with an interest in testing them. [Conversely there is] a drug that is on-patent with a company that has a very strong interest in testing [it]. Very quickly in the epidemic, Gilead [which] is a pharmaceutical company in California...came up with the idea that remdesivir is useful for treating patients with [COVID]. They run a study and within two months, the FDA approves the drug for use in hospital settings—they still use it...though I don’t think it works very well. Nobody has an interest in testing any of these other drugs [and] very quickly running studies. It’s the responsibility of the NIH actually to do that...[testing]. It’s the responsibility actually of the NIAID—Dr. Fauci’s organization—to do that; but they didn’t do that. There’s now a study for ivermectin that the NIH has approved which I think is due to be complete sometime in 2023...we’ll know the answer in 2023 for ivermectin. That I think...is an enormous failure of public health policy. We moved heaven and earth to...develop and test the vaccine. We should’ve made an equal effort to develop early treatment, and it’s a failure of the NIH.”

“[Regarding the efficacy of early treatment] there are...25 randomized clinical studies that I’ve seen on ivermectin so far, and they come to different conclusions. So the answer is I don’t know if [ivermectin] works or not...there is not a definitive study that’s been done on it.” He reflected, “that is a scandal: the idea that ivermectin might work was known in 2020. We

should have an answer by now [as] to whether it works or doesn't work. A lot of the controversy you're seeing around ivermectin and...hydroxychloroquine should have been resolved in 2020. We had the resources, we spent trillions of dollars; there was no reason not to do definitive studies on the effectiveness of these [cheap] drugs...it's great to have drugs that come out by drug companies but they are very expensive and you can't use them in poor countries where many cases of COVID happened. So there is a real good public policy reason to test cheap [off-label] drugs.”

To address the ethics of using off-label drugs, Bhattacharya related, “If a drug company...gets a drug approved by the FDA, now doctors have a right to use it in other settings that are not specifically approved by the FDA.” He described this scenario as “very, very common [and that] aspirin is a good example of this. For many years, aspirin was a...pain-reliever. Then [it was later discovered that low-dose aspirin] could be used to prevent heart attacks...so people [started using aspirin for that] even though the FDA didn't approve [the drug] for heart attack [treatment]. So now there's recent literature to suggest that [aspirin] might not work so well for that. Anyways, such is science.” He discussed, “You have a situation where it is normal for doctors to use drugs in ways that are not approved, that are not on-label. Should the doctors have a right to do that? Absolutely...because [doctors] pay the consequences if they're wrong—it ends up being malpractice. Many doctors want to use ivermectin and yet they're prevented from doing [so].” Dr. Bhattacharya described how he personally would not try a drug that has not been FDA-approved “but that [he could] understand why someone who is in dire straits clinically would want that...there's a good ethical case to be made for allowing doctors to prescribe it in those situations...we as scientists have an obligation...when we see doctors using a drug...for this kind of setting...to evaluate as quickly as possible whether it is right to do

so...the scientific failure, the policy failure, to evaluate these early treatments [is] an enormous mistake during the early pandemic, and it's a mistake you can put directly at the feet of the NIAID and Anthony Fauci."

Dr. Bhattacharya reflected, "I don't think [Dr. Fauci] is driven by monetary considerations; I think he has from an early age of his career had an intellectual attraction to vaccines. In the HIV days, he invested a ton of money and resources into the NIH towards vaccine development and was famously much less active in trying to get the drug out for HIV." Bhattacharya concluded, "If I'm going to try to understand [Dr. Fauci], it's most likely that he is just intellectually attracted to the vaccines which actually worked out here [regarding COVID-19] in some ways. But there's no reason not to also relay the same kind of effort into early treatment and development."

He went on to say, "I've been telling the people on Fox that the vaccines are great because I am a big advocate of [vaccines]...in January when [the vaccines] came out, I looked at the clinical trial data published in the *New England Journal [of Medicine]* by Pfizer...it looked like [the vaccine] not only prevented severe disease but also stopped [the infection]—99% efficacy against both. So in January I thought [the vaccine] was going to stop the transmission of the disease. That turned out not to be true. In one sense, the vaccines protect against infection for a short while—[for a couple, 3 or 4 months]—but after a while the efficacy against infection drops very sharply. So for instance I got vaccinated in April of 2021 and then I got COVID in August of 2021. The vaccines on the other hand seem to have very good efficacy against severe disease—they will keep you out of the hospital. That's not nothing. In fact, that is huge...I wish [the vaccine] would stop transmission but it does not stop transmission."

He later shared that “[he thinks] that vaccines are the single most important scientific [medical] discovery in history; they’ve saved countless lives, and I’m a big advocate of them but you have to understand what the science is saying about them and the proper use of them.”

He admitted, “I’ve served as an expert witness on—I’ve lost track of how many—cases opposing the vaccine mandate. I think the vaccine mandate is an enormous public health mistake...I think a mandate is justified when you have a vaccine that stops transmission...[so] if I [were to] get vaccinated with a vaccine that stops transmission, I not only benefit myself but [also] you all. I’m...posing less of a threat to you all...there’s a public benefit...on the other hand, if you have a vaccine that mainly provides a private benefit but not a public benefit, it’s a very different situation. When there’s a public benefit, you have...a positive externality...as a result...there’s actually going to be less demand than is socially optimal for the vaccine...there you might want a mandate...because people aren’t going to want [the vaccine] as much as they ought to and they’re not taking into account how much they’re protecting others. You may want to induce them to [take it]...this is a vaccine where there is much less of a public benefit and much more of a private benefit. So the economic justification we would normally use doesn’t apply with the same amount of force as it normally would for vaccines...the vaccine mandates by themselves on the other hand have imposed enormous harm...there is absolutely overwhelming evidence that if you had COVID and recovered, that you are actually very well-protected from...getting COVID again.”

Bhattacharya referred to an Italian study that tracked individuals during their COVID-19 recovery and identified a 0.3% rate of re-infection one year later. “That’s much more complete protection than [what] the vaccines [offer],” Bhattacharya noted. “Many of the people who got COVID [were] essential workers during the epidemic...they were regular working-class people

who got COVID and recovered [and] the vaccine mandates put that working-class out of work.”

He related that the “vaccine mandate has created an enormous problem for public health, it’s created a huge under-cutting of the trust in public health.”

He openly stated, “I sympathize with people who don’t trust public health and its pronouncements...particularly with this denial of natural immunity [conferring] protection. Public health has gone out of its way to deny overwhelming scientific evidence that there is...considerable [natural] protection...so I think the vaccine mandates in this setting undercut trust in public health and do not serve the purpose that people say they would, which is to end the epidemic. Even if 100% of us are vaccinated, COVID will still spread.”

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