

## How Big Pharma Corrupts Medical Knowledge – Dr. John Abramson – #901

Dave Asprey:

You're listening to The Human Upgrade with Dave Asprey, formerly Bulletproof Radio.

Dave:

You're listening to The Human Upgrade, with Dave Asprey. This episode is recorded in Austin, Texas, where I'm here to speak at an anti-aging event, actually got a chance to meet Steve Horvath, the author, or the creator of the Horvath clock for cell aging, and learn a little bit more about how we're going to make ourselves a lot younger than we were and how to measure it along the way. But that is not the topic of today's episode. Today's episode is something where you're going to learn how big pharma controls research, you're going to learn about how they withhold data and how they shape information that doctors then see, so that when you go to your doctor, your primary care doctor, your doctor is doing his or her very best to serve you based on data that has been manipulated.

And the reason I want you to listen to today's episode is not to complain about big pharma, turns out big pharma makes some really useful tools, and I'm a big fan of being able to understand human biology and to make custom molecules that manipulate my biology, that I can choose to use or not use, but I want to do it based on real science, not based on marketing garbage, the same thing that big food has done to us. So our guest, Dr. John Abramson, explains exactly for you in this episode, how big pharma has corrupted medical knowledge and how they keep doing it. You're going to be able to walk away, should you choose to listen to this entire episode, with some more knowledge to help you make better choices for yourself. And again, this is not a complaining episode, this is an understanding episode, just so you know, you're aware and you can make better decisions for yourself.

And the reason that Dr. John Abramson is a great guest today is that he's only been teaching healthcare policy at Harvard Medical School, where he's been on faculty for 20 years, so I mean, he barely made the cut for the show, but he's also spent 22 years as a family doctor. So he's got the public health side of things, but he's also got the "hey, I see patients' side of things," which I think makes it really, really interesting. And he's also worked with the FBI and the Department of Justice in national drug litigation, without being paid. So this is a guy who's just faced medical corruption in his career and is teaching and in other things, and is here to talk about it and has written about it and has just worked with big pharma. So if you want to know the inside scoop, this is the episode for you. It is in honor to have you on the show today, John. Thank you.

Dr. John Abramson:

Well, thank you, Dave, and thank you for the kind introduction.

Dave:

You wrote a book about this a while ago that some listeners may recall, it was called *Overdosed America, The Broken Promise of American Medicine*. This is a 2004 book, do you feel vindicated only 18 years later? You wrote a book about this a while ago that some listeners may recall, it was called *Overdosed America, The Broken Promise of American Medicine*, this is a 2004 book, do you feel vindicated only 18 years later?

John:

Well, I feel like I've learned a lot. I left practice in 2002 to write *Overdosed America* because the information that I was relying on and my colleagues were relying on, had gotten so commercialized that it was becoming impossible to practice good medicine. And Vioxx was the straw that broke the camel's back from me, an arthritis drug that was marketed, it came out in 1999 and it was supposed to be a superior arthritis and pain drug because it caused less GI problems, fewer GI problems. But in fact, it more than doubled the risk of heart attacks, strokes, and blood clots. And the New England Journal of Medicine article that published Merck's research that claimed to show that Vioxx was a safer drug, and therefore advantageous, didn't include all of the cardiovascular problems that occurred, and did not report to the physicians dutifully reading their New England Journal, that it more than doubled the risk of heart attacks and strokes.

Dave:

It's so weird that big pharma would hide evidence of stroke and heart attacks. Who would've ever thought they might have done that before? Maybe they might even be doing it now, how would we know, because they're not trustworthy, right?

John:

Well, we wouldn't know, we wouldn't know until there was litigation about the next drug disaster, and that takes five or 10 years after the drug comes out. So the real problem Dave, is we can go into the details, but in broad brushstrokes, research has been taken over by the drug companies. They pay for 86% of clinical research. They choose what to research, which is how to make new drugs that are going to maximize their profits, so they can maximize the return, the financial return of their investors. They design the studies to show that the drugs are effective and safe. And they own the data so that when the studies are written up, when the results of the studies are written up and submitted to medical journals, they don't make the real data, the underlying data from the clinical trial available to the peer reviewers or medical journal editors.

So when doctors are told that good doctors practice evidence based medicine by reading their peer reviewed journals, the docs do not understand that those articles have not really been peer reviewed because the peer reviewers haven't had access to the data. And then they claim to own the data. There's a wonderful slide in my book from Pfizer litigation, stating just baldly that when Pfizer does studies, they own the data and the purpose of their studies is to support their marketing efforts. It's right there, you'll see it in the book, in *Sickening*.

Dave:

This is in your new book, I was going to mention, your first book came out and then you waited a long time before you wrote *Sickening*, which the subtitle, *How Big Pharma Broke American Healthcare and How We Can Repair It*, which has a hopeful air to it in how we can repair it. What was the trigger to make you write *Sickening*? And did you decide to write it after the pandemic or before the pandemic?

John:

Long before the pandemic. So what happened is *Overdosed America* came out and Vioxx was pulled off the market a week after my book came out, Vioxx was pulled off the market. It was not directly because of my book, a second Merck study confirmed that Vioxx doubled the risk of heart attacks and strokes and blood clots. And Merck knew that they couldn't possibly even think about hiding that data, and they pulled the drug off the market. 40 to 60,000 Americans had died from taking Vioxx, even though Merck knew that it increased the cardiovascular risk almost as soon as it came out on the market. So I was the

guy who wrote the last book and I started to get called and was on The Today Show a couple of times and all over the media, and lawyers saw me speaking English and explaining science. And the lawyers started to ask me to serve as an expert in national litigation, and I spent about 10 years full time in litigation as an expert.

Now in litigation, you get access literally to the hard drives from the relevant executives and scientists in the pharmaceutical company. So I know what's going on, I've been in there. A lot of it I can't tell because I've signed a confidentiality agreement, but some of the cases went to open trial, and I can talk about what I know in those cases. So I spent about 10 years in litigation and then decided, I had written *Overdosed America* from the point of view of a family doc with having done a research fellowship, and I understood data and wrote *Overdosed America* in 2004. Now I understood what was really going on, that is invisible, that docs can't see, that docs don't know about, and that's why I wrote *Sickening*. Now it took me about more than five years to write *Sickening*, to tell this story, to get this story down to 230 pages was an enormous job, and here it is.

Dave:

You only mention COVID in the introduction of the book, because you started the book long before COVID was a thing. But of course, during that time, there probably were at least two other multi-billion dollar profiting, pseudo pandemics that were 1/65th as dangerous as they were originally reported to be, like bird flu and SARS and all that. What do you think about how the drug companies have behaved during the pandemic?

John:

So I think I really endorse, in your introduction you were saying, thank God for the drug companies, because they produce some good drugs, and we've got to remember that. Virtually all of medical science for pharmaceuticals that comes through the FDA to be available for people to use, comes through the drug companies. So they've got a lock on medical science and medical science can do some good things. It turns out that the vaccines, especially the mRNA vaccines, Moderna and Pfizer vaccines are a perfect example of the problem we have with drug companies. They've made a great vaccine, they've saved an enormous amount of lives, the vaccines are built on technology that was developed by the NIH, the private industry was there to create the vaccine and manufacture the vaccine very quickly, and that's a really good thing. But, and this is a big but, the job of the pharmaceutical companies is to make as much money as they can for their investors, and we can never forget that.

No matter how much they say they're dedicated to innovation so we can live better lives, whatever their story du jour is, their job is to maximize their profits. And with the new vaccines, which are effective, to maximize their profits, they maximized their sales to wealthy countries, and a far disproportionate amount of the vaccines that were produced, went to wealthy countries, not to poor countries. The World Health Organization, The World Bank, The World Trade Organization, and the IMF, put out an all-hands-on deck emergency plea last May to say, we need \$50 billion to vaccinate underdeveloped countries. If we don't get 40% of underdeveloped countries vaccinated by the end of 2021, which is gone, we're going to have ongoing pandemic, and we're going to have ongoing variants, like Omicron, come back and bite us in the butt.

So the pharmaceutical, the manufacturers of vaccines are very happy to sell most of their drugs in the first world, maximize their profits, which are huge, but not make sure that the third world is vaccinated. And therefore, the third world is going to remain a breeding ground for variants that are going to come back and haunt us. Now, one more point I want to make about this, those four organizations, the World Health Organization, and the others, made this plea for \$50 billion, so that they

could execute this program to get at least 40% of the citizens of all countries in the world vaccinated by the end of 2021.

The sad part of this story is that there were 17 billionaires who had made \$50 billion from vaccines at that point, they had pocketed \$50 billion and they could have just turned that money over and protected, globally provided protection, decreased, we can't say absolutely, but greatly decreased the risk that variants would continue to come back and bite us. So in some, the pharmaceutical companies made great vaccines, but because they were so greedy and so intent on maximizing their profit, they neglected to vaccinate the breeding grounds for variants that are going to come back and haunt us and overpower, most likely, their vaccines.

Dave:

Now, it seems like there were some claims made at the beginning of the pandemic about vaccine effectiveness and even safety, that maybe now we're on our fourth booster in Israel and things like that, that seemed that they're making some very aggressive marketing claims that maybe weren't true, or at least weren't proven when they made them. Fair statement?

John:

Yes. And unfortunately, they were picked up by some of our politicians.

Dave:

They're making some very aggressive marketing claims that maybe weren't true, or at least weren't proven when they made them. Fair statement?

John:

Yes. And unfortunately, they were picked up by some of our politicians and public health people. I think that what happened is that it was clear that the vaccines were going to work and people got over their skis in their exuberance about the vaccines, making safety claims that couldn't possibly have been true because there wasn't enough data to confirm, people hadn't had the shots long enough to confirm the claims that were being made. And I do think that that contributed to some anti-vaxx sentiment and still I get questions about that. And I want to make it very clear that that was wrong, but we haven't seen major safety problems, and you won't find a more committed critic of the pharmaceutical industry than me. But that said, the vaccines work, and I say to all adults, and I would recommend it for children, there are some questions about children, but to all American adults, please, the pharmaceutical industry has done some very bad things, they cannot be trusted without being overseen, but they also do some good things, and this is an important one.

Dave:

Now this is not an episode about COVID specifically, and I would say that there's been unprecedented concerted undermining of a doctor's right to say this treatment isn't good for this patient because past history, and some pretty egregious pulling of medical licenses for people who show medical exemption for something we say, based on the evidence, in my medical opinion, this person not to get, insert name of any treatment, is that driven by drug companies, is that driven by public fear, is public fear driven by drug companies? What's taking away a doctor's right to say whether it's a good idea for a patient to use a vaccine or an antidepressant or anything else?

John:

Yeah, I think it's all the above, plus I think it's a sense of complete urgency, that we're dealing with a public health crisis and people are trying their best to avoid hundreds of thousands more deaths. We've had 800,000 deaths, this is an enormous crisis. And I agree with what I think your question is really begging, which is, is there overreach in the part of suppressing discussion about the pros and cons of vaccines? I think so. I wouldn't do it, but I would do my best to get the message out to say that adults should be vaccinated.

Dave:

I absolutely hear your message there, and some listeners of the show are probably not of the same opinion and some are, and it's okay to have the discussion here. And that's part of the problem, is I haven't seen any time when it was not okay to make the discussion. And I know at least three dozen doctors I've spoken to personally, who are saying, "I'm afraid from my license. I have a patient with mass cell activation disorder, with a history of really strong immune reactions to injections. I want this patient to be one of the ones who ..." it's not worth the risk for them, but the doctor feels like they can't do it because not only will the patient not benefit, the doctor can lose their license. And that feels like it's not driven by the government, but it's maybe more driven by pharmaceutical manipulations, where it's like, everyone has to do it, even if it'll kill them, or maim them.

Even though, like you're saying, for the average population, the data that you and I both have right now, and I would question the VAERS data anyway, the reporting system is not very good in the US, but okay, it maybe not as safe as some other longer tested vaccines, but generally, most people aren't dead right now who got the vaccine. So you and I could get into long discussions about that, which isn't the point of this. The point of this is to talk about the pattern of malfeasance of the drug companies, about what we can do to fix it, so doctors and even lay people and university researchers get real data instead of getting either cooked data or withheld data. How much of the problem is cooking of data, versus we just didn't tell you the data?

John:

We're not going to know until the dust settles on this, you're going to have to open up the books on the data.

Dave:

I don't mean for COVID, I just mean for the general pattern of behavior that we're seeing over the past 40 years, what you write about in Sickening. Are they just lying or are they saying, "Well, we knew this, we just didn't tell you this," because those are different behavior patterns.

John:

Yes, and it's a combination. Sometimes they're just [crosstalk 00:19:51]. Oh, I don't know. When I was an expert in litigation, I was like a homicide detective, I didn't see good people going to church, I saw bad stuff [crosstalk 00:20:05]. Yeah, so in the cases I saw, there was a lot of malfeasance, but I didn't see a general spectrum of what's happening.

Dave:

Fair point, you would have a selective bias. You'd be like, "They're all dirt bags," and that's probably not true.

John:

A high percentage of the folks that had come my way, by the time I got hired, there was pretty good evidence that something had gone definitely wrong.

Dave:

It makes sense. Let me run a pet theory past you, and I know you can't know whether it's true or not, but you have such a great lens to see over time and over a lot of distance, so just tell me if this smells directionally right. There's emergent behavior in complex systems, which is what I study, artificial intelligence and even systems biology stuff, this is what I write about. And it feels like some corporate bad behavior, whether you're talking about Amazon destroying businesses with their business practices, or you're talking about big pharma's behavior, it isn't necessarily one evil person going, "I'm the puppet master." It's more 50,000 people making tiny little seemingly harmless micro decisions, "Oh, this wasn't really the best, but this is good enough."

And when you add that up over time and you amplify it over layers and layers and layers of organization, you end up with these things that look really malevolent. Is it more emergent behavior or is it more, yeah, there really is a bad puppet master up there saying, "I'll crush the data I don't like, and I'm going to hide it," and there's someone to blame?

John:

I think it's a combination, but I definitely, definitely saw in many of the cases I worked in, where good people had done the science, and as far as I knew, reported the science accurately. And when the marketing folks and the executives got a hold of it, their culture is to figure out how to maximize sales and maximize profits. And I think the ether that they work in is that maximizing profits is justified and we've allowed that to go on because the penalties, the financial penalties aren't high enough, and the actual criminal penalties, going to jail, rarely happens, even when there are felonies committed and many people die, people rarely go to jail. So it's like trying to play a professional football game without referees and letting people call their own fouls, you've got an unsupervised situation where people are paid to win and that's what happens.

Dave:

And when you say unsupervised, but isn't the FDA supervising these drug companies?

John:

Somewhat.

Dave:

I tried not to laugh when I said that.

John:

Yeah, no, their job is not to do, I think what I'm going to tell you is different than what you think their job is, their job is to look at the data that's submitted for a new drug application and determine whether there is evidence that giving that drug provides more benefit than giving nothing, and doesn't cause more harm than it provides benefit. That's their job. Their job is not to say what's the best drug or what would a good doctor prescribe, and even more important, their job, they have the data, but their job is not to correct medical journals when they know that the data have been misrepresented in the medical journals.

Dave:

Yeah, not at all the FDA's job, that's clear. Should it be their job? I mean, it seems like they're the hand of suppression and censorship anyway, I mean, I know some of the bad things the FDA has done to supplements and to even certain medications like GHB, that is a really good sleep aid, but competes with Ambien.

John:

Yep. Somebody's job should be to provide doctors with information about which drugs provide the best therapy that is not otherwise available through other means. The United States is almost unique amongst wealthy nations in not having anybody, any organization that does that. It's called health technology assessment. And it creates this wild west marketing environment where drug companies invest fortunes in creating brands. They actually use the word brand, branding their drug. And they can make up these stories that are attractive to consumers without being called to task, without anybody saying, "Hey, your drug Humira, costs \$70,000 a year," and for many people with arthritis, it's no better than methotrexate, which costs a fraction as much, fraction as much. And that evidence is in the drugs label, but nobody's bringing it out and overriding the drug advertising for Humira and the sales that have gone on, and the tale of the patent, so that they've been able to have the best-selling drug in the world for many years.

Dave:

In the 90s, the drug companies lobbied and won the right to advertise directly to consumers, the prescription drugs. If you could wave your magic wand and go back in time and undo that, would the world be a better place?

John:

Yes, somewhat better, it certainly wouldn't fix this.

Dave:

Okay. It would help.

John:

It would help. But here's the thing, lawyers who I trust tell me that our constitution is different than the constitution of other countries and that the free speech is protected in our constitution, and that even with a balanced Supreme court, you would not get the Supreme court to allow forbidding of advertising of prescription drugs. You and I know that net, it's not creating social good, but that it's a matter of freedom of speech that they can advertise. But they could be made to leave viewers with a true impression of the medical and economic value of the drug. In other words, you could have to include in your advertisement, is this the best therapy or are there other therapies that are equally good and cost less money? And you could include in your advertisement, how many people do you have to treat in order to achieve this benefit? They don't do that.

So when we say Trulicity significantly reduces the risk of cardiovascular disease in people with diabetes, that's true, but it's a very small benefit when you do large studies, only a very small benefit will become statistically significant. So there's a difference between statistical significance, which allows them to make the claim Trulicity reduces cardiovascular disease, that's statistical, on a statistical basis, but on a clinical basis, it's a very minimal benefit.

Dave:

Okay. So we could have black box warnings that talk about this 10% reduction in Alzheimer's, of which you only had a 9% chance,, equals relative risk versus real risk is something that more people know about now because of all the just endless press about COVID, but it's still a statistical form of trickery. And you're saying we could have labels on the drugs that require you to say, "Here's what's actually going to happen," versus the change in what might happen.

John:

Right. And let me give your audience just a real quick lesson in interpreting the benefit of drugs. There's relative risk, if you reduce people's risk of getting hit by lightning by 50%, that sounds like a really good thing, but you might have to treat two million people to prevent one occurrence. If you take the absolute risk reduction, what percentage, compared to the people who don't get treated with the drug, what percentage of people who take the drug don't get the disease? And that would often be something, it could be say, 0.3% absolute risk reduction. Well, if you take that 0.3 and divide it into 100, you get the number needed to treat. So if the reduction in absolute risk were 0.3 and you divided it into 100, you would have to treat 333 people in order for one, for one not to get a bad outcome, not to have the disease, not to get the disease.

Dave:

So then you realize that just some drugs don't make sense, even though they might if you look at it through a certain lens, when you look at it through a broader lens, you're saying, "Well, there might be some side effects with that drug." Most of them, we know the side effects or some of the side effects, and you're saying, "Oh, it just didn't make the cut. But if you've invested \$100 million in the drug, you might not want to talk about that."

John:

That's correct.

Dave:

You talked earlier about the free speech issue for companies, and there's something that happened in the US, I don't remember the year, it was a Supreme court decision around corporate personhood, and they decided that corporations are the same as humans and have the same rights as humans. And that's what gave rise to the free speech for companies to allow them to market their drugs.

The thing about people is the way oppressive governments work, and the way they have always worked, is that with a person, you can threaten their mother or their children, you can throw a person in jail, you can torture them and you can kill them with the death penalty. That's how governments work when you really go up against them. Anyone who's crushed a revolution in Central America or something, that's how it's done. You can't do that to companies. So I would argue that they're not people, but the corporate equivalent of a death penalty is a fine equal to the value of the company, but the government never does that. Have you ever seen discussions maybe that you're allowed to talk about, has anyone ever considered a fine like, "You know what, we are going to take apart your business and sell apart the pieces because you have done so much wrong." Is this in the future, do you see this ever happening?

John:

I don't. I don't. And what happens is it's even worse than that because when a big drug company gets found by the Department of Justice to have committed a felony, but there are no people that get charged, the company gets charged with the felony, but the Department of Justice will often allow a subsidiary of the company to take the hit so that the death penalty for the drug company would be getting what's called disbarred from Medicare, you can't sell drugs to Medicare patients anymore, but the subsidiary takes the hit, so the drug company's not on probation.

Dave:

That makes sense. And also the senior execs like, "Oh no, no, it was that junior director down there," and they'll always take the blame from the top levels and roll it down.

John:

They don't have to do it, they don't go after them. It's very rare, very rare that the senior executives are the focus of criminal investigations.

Dave:

It's also true, as a senior executive here, you probably wouldn't be a senior executive if you were going to go to jail when some other senior executive did something bad. This is a problem in all businesses, and even board members have to deal with that. And I'm on multiple boards of directors, I get it, you're always balancing that. But there are times when you sit down and say, "We are not going to do that, A, because it's wrong, B, even if you guys want to do, it's illegal, and I'm telling you right now to your face, if you do that, that you could go to jail." That usually gets recalcitrant board of director members to behave themselves. So I know some of that happens in boardrooms and of course it all happens, if you put that on the record, you're not a very nice board member, but sometimes it's there as a tool. So you probably have seen stuff like that in things you may or may not be able to talk about in some of the cases, because it gets ugly sometimes.

John:

Right. But we look at Oxycontin and the Sackler's, don't think they're facing jail time, they're arguing about having declared bankruptcy and keeping, I don't know, a handful of billions of dollars.

Dave:

It's like you declare bankruptcy, but you still get to keep the Monet.

John:

Yeah.

Dave:

That was my dad joke.

John:

And if there were a drug executive or two sitting in jail, it would sharply curtail the frequency of this behavior.

Dave:

So they need to elect amongst themselves, which one they're going to throw under the bus, frame and send out there.

John:

Well, they haven't had to make that decision yet. I don't know if they're getting ready to. But they have, the drug companies have been fined, I think \$38 billion by the Department of Justice for-

Dave:

Over what timeframe is that, it's over 20 years?

John:

Around 20 years.

Dave:

I know 10 billion in the last 10 years. And so when you talk about that, you just can't trust it. And what I want to talk with you about is how do we put trust back in science? What would your top recommendation be to fix this problem? I know it's part of the book, part of your new book.

John:

Yeah, it's quite simple, you can't do science without having your scientific data being open for independent analysis. In the 1660s, the Royal Society of London adopted the motto, Nullius in verba, Isaac Newton became the head of it, and Boyle, and the physicists who really started to define how the universe works. Nullius in verba, which means, it's Latin, and it means take nobody's word for it. But we have now gone, our scientific standards have gone back behind the enlightenment, we've gone back before the enlightenment because the drug companies claim ownership to their data, they don't let peer reviewers and medical journal editors have access to their data, they don't let the experts who write the clinical practice guidelines that set the standards for your doctors, have access to the data. They only have access to the published data, so that there's not external oversight of the data. And of course you're going to have cheating and manipulation, that's their job is to maximize their profits.

I mean, it's like professional basketball players, they play a little bit dirty, it's their job, they push the limit and the referees call them on it sometimes and occasionally someone gets thrown out of a game. But we don't have referees here overseeing the integrity of the data, and there's just no way to run a healthcare system without the data.

Dave:

So it's a data problem, and we don't have an enforcement agency to do data enforcement.

John:

Data analysis and then enforcement, correct. That's part of the problem.

Dave:

Would you propose we create one of those?

John:

I would propose, I would say that we need some mechanism for overseeing the integrity of the data. Now, some people feel that government is hopeless and to have another government agency wouldn't work. We don't have to have a government agency do it, like the National Academy of Medicine is not a government agency, it's an independent voluntary institute and they could do it. They could create a mechanism for analyzing the data independently and making sure that the reports are accurate, but we need some way to do it. The other wealthy countries have figured this out. We see this very clearly in the high price of insulin. It's been an issue, everyone knows about it. We're now working on the second generation of bioengineered insulins, they're called insulin analogs. The first generation came out in 1982, they're called recombinant human insulin. The recombinant human insulin is quite inexpensive, it costs about \$480 a year or something. The insulin analogs cost about \$5,200 a year, or they peaked at \$5,200 a year.

The issue is that about 80% of the insulin that's used in the United, is used by type two diabetics, and there's not evidence that the insulin analogs are superior to the recombinant human insulins. In other words, type two diabetics, most, somewhere around 90% of type two diabetics are using insulin analogs that are 11 times more expensive than recombinant human insulin. Other countries with health technology assessment, take the UK, they make a recommendation to their doctors to start type two diabetics on the older generation of insulins, and for the few who don't do well, you then go up to the expense of insulins. But we've allowed the drug companies to create the impression in doctors minds, that the insulin analogs are superior for type two diabetics, and about 90% of our type two diabetics get started on these expensive insulins. And the key here, which I think is near and dear to your heart than all these statistics, is that all the money that we're wasting on these expensive insulins, \$20 billion a year, \$23 billion a year-

Dave:

Just 20 billion here and there. Yeah.

John:

Yeah. But it would go pretty far to having lifestyle, healthy lifestyle interventions at community Ys, YMCAs across the country, to get people into effective programs that will help them mobilize their desire to be healthy and just not waste the money on the unnecessarily expensive insulin.

Dave:

Yeah, we could fix school lunches across the country for that much money, which would also eventually result in a reduced diabetes rate, right?

John:

Right, and teach kids to eat well, yes.

Dave:

Yeah. So the drug companies seem to really dislike nutrition and supplements and lifestyle interventions. Have you seen evidence that you're allowed to acknowledge exists, that they're actively taking steps to suppress or disparage those kinds of things or control them?

John:

Yeah. Well, you can see it in its absence. So statins are now the most frequently prescribed class of drugs to lower cholesterol, and we can talk about the limited benefit they have for healthy people. But what you don't see is there's never been a study, never been a study that compared statin therapy to lifestyle intervention for people at risk of heart disease. Never been done.

Dave:

I wonder why?

John:

I wonder why, right. So it's not quite an affirmative conspiracy, it's a coalescence of interest.

Dave:

It makes great sense. There are other times when there's actually a patent, I think it's Merck's, but don't quote me on that, for statin drugs with coenzyme Q10 along with them, because they know that it creates a coenzyme Q10 deficiency. And there's another one for Metformin with B12, because they know Metformin creates a B12 deficiency. But they don't sell those, they just patent them. They allow the deficiency to happen, which funny enough, increases your risk of other diseases they can sell drugs for. And it seems unethical, and it seems like it ought to be illegal to have that knowledge, sell the drug, when there's an easy way to fix that problem to reduce side effects, but there's no legal or regulatory thing responsible for that, right?

John:

That's right Dave. And the problem is that the drug companies have total control of the commercialization of medical science. Total control. And there's no other regulatory body or organization or mechanism for prying loose the parts of medical science that aren't going to maximize the drug company profits, but that would maximize our health. So we let them have this control, but there's not a commensurate concern about the public welfare that's protected in this arrangement.

Dave:

Okay. I'm with you on that, there isn't a way to do it. And we're picking on big pharma because you cited it, but the same behavior happens from big food and it's happened from, I'm going to call it big ag. And this pattern is in industry after industry, after industry. And it may be a size of company issue, it may be a basic human psychology issue. Something that Robert Cialdini writes about his book Influence, we're easily influenced by things. I'm not sure that we know the solution, but it feels to me like if we don't figure out how to fix the systems of our culture, of our government, of our behavior, or maybe hack our brains or something, we're probably going to make ourselves extinct over the next couple of hundred years because these big short term decisions are really awful. Do you share that same concern?

John:

I absolutely do. And what we're going to do on the way to creating some disaster, is create such discord, political discord in our country, that we're so busy tearing each other down that we forget that we can work together to build each other up.

Dave:

Mm-hmm (affirmative). Well, I think it's a possibility, I'm certainly working on doing that. And I think there are some big systemic changes, and I don't think they're government, I think they're cultural and they may be biological, but we'll figure that out because fortunately, even with all the doom and gloom we're talking about, we do have machine learning and AI systems that can help us see the patterns that would be invisible to mere mortals, which is really important. I'm hopeful now that we continue to be able to see things, I would not be surprised if five years from now it was illegal for non-licensed people to see PubMed because that's the direction of censorship right now online, I'm quite concerned about it, where you just can't talk about certain things and that's unprecedented, but it is driving profits for certain companies and that's scary, and again, there's no one really in charge of that.

John:

Now let me just frame the problem so that we know what we're talking about here, American healthcare, we fantasize that American healthcare is exceptional and unique in the world, and it is, in fact, it's unique in that we spend 7% more of our GDP on healthcare than the other wealthy countries, which means that we're spending, wasting \$1.5 trillion a year, \$1.5 trillion a year. We spend more as a percentage of our GDP than the other wealthy countries. And for this \$1.5 trillion, pharma will tell you you're getting the best drugs and you're getting access to the best drugs, the newest drugs, the most expensive drugs. The healthy life expectancy of Americans ranked 38th in the world in 2000, and since we've been spending the 7% more of our GDP on healthcare, our ranking in the world has gone from 38th to 68th. American's health now ranked 68th in the world, behind Jamaica, Cuba, China.

Dave:

Anyone listening from the US would be embarrassed right now, for the amount you're spending out of your paycheck for forced insurance buying, for an insurance company that stops your doctor from writing scripts for the stuff you want because your insurance company was manipulated by a drug company. It feels dirty to me, but I don't know, is it dirty?

John:

We've let the capitalism run amok. And even Milton Friedman, the great guru of free markets said, there's limits, there's limits, you got to make sure the markets work, you got to make sure contracts are enforced. But we're not doing that. So it we've let this industry, it's like a rogue industry, it has so much money in its pockets, it's making so much money. It's spent 50% more than the next highest industry in lobbying since 1998. It's got political contributions that go to both parties. There's just too much power in the pharmaceutical industry. They're complaining that if the whittled down recommendations to allow 10 or 20 Medicare drugs, the price of, excuse me, to allow Medicare to negotiate the price of 10 or 20 of the most expensive drugs it pays for, that have already exceeded the life of the patent, and they're complaining that that's going to kill their innovation and probably that's going to decrease Americans access to beneficial new drugs by about 0.5 drugs every 10 years.

That's the consequence. I can go over the arithmetic with you, but that's the consequence. But they're paid to say it's going to be a nuclear winter in innovation because it's going to cost them some money.

Dave:

Well, it's such a ball of wax because the nuclear winter and innovation is also driven by incredibly high regulatory burdens from the FDA, for some of the innovations, spending a hundred plus million dollars to prove some things work, where you could spend \$10 million in India or Singapore and get it to work.

So it feels like you can put it on the attorneys, you can put on the insurance companies, certainly big pharma's playing a big role here. And I don't know that this is a time when you can point to one thing and say, you have to fix it, because there's too many other bad actors that there's got to be an underlying change that's foundational.

And certainly show me the data, sounds like the right thing to do, and I don't know if you can have a constitutional amendment for show me the data, but I would like one that said you have a right to see the data and you have a right to make your own decision based on the data, with whatever input you want from your doctors, your priests, your rabbi's, or you can consult your astrological charts, I don't care, you see the data, you make the decision. Going straight back to the 1600s, it wasn't that hard back then, it's not that hard back now, we just are far away from that system.

John:

That's right. That's right. And there's another dimension to it, one is show me the data, the other is what we're studying. So 96% of what we study is new drugs and devices because that's where the money is, and about 2% is preventive medicine. And the market itself is not going to rebalance that apportionment of investment because that's how you maximize the returns that the investors get. So there's got to be a mechanism for saying, "Look, medical research has to be epidemiologically balanced to optimize American's health." How we do it, I'm not so sure, but we need it.

Dave:

Okay. I think we do, and I'm hopeful that we'll get there, and if not, there's going to be changes at higher levels in government. There'll be a lot of very angry, very sick people, and when you have a population that's poor, angry, sick, stressed out and hopeless, history shows us what happens in those times and that's why the government, whose overarching desire is to stay in power, that's the algorithm for all governments on the planet, is you got to do that if you're going to govern, there's risk there. And so I'm really hopeful that our government figures out that it won't stay in power for another 50 years if this continues on the path it's on, because there will just be too many people who can't do anything anymore. So I'm concerned.

John:

I agree, Dave, I think we should be talking about this because it's not a left, right, it's not a Republican, Democrat issue. It's that the commons of health, of American health are getting destroyed and people from the left and the right, there's so much room to meet together in the middle and figure out how to solve these problems, and yet we're told, when we listen to the news, that we hate them and they hate us, and we're saying bad stories about history and blah, blah, blah. And what it does is it makes us believe that we can't get along. And Jesus, we just want to live and have healthy kids and have opportunity to live a good life and use medical science the best we can. There's so much common ground, and yet we're losing sight of it because of these wrongs that are going on are creating such confusion.

Dave:

It is indeed the division of society into all sorts of things, we've got red versus blue, the racial stuff that's been driven by the media and now we've got the vaxxed versus unvaxxed, and somehow that's been politicized. And hopefully people listening to the show think about it. I get in a car with an Uber driver just on this trip, I'm in Texas, Uber is very forceful with their drivers, they do not have a choice. And a lot of service employees now, they have to wear a mask, even if they are double vaccinated, even if they

don't want to, and they don't get a choice about it. And I've talked to dozens of them on this trip, and they're saying, "I'm not really comfortable doing this, but I have to, even though you don't." So we're creating this class system where if you're working as someone who's helping another person, you have to be faceless, but the person standing in front of you doesn't. I also think that's creating divisions in society, where it's like, well, pick one.

But you're seeing corporations force behavior like that as well that's divisive. So I've just started saying, you don't have to do that to keep me safe. And there are others, including you, who might believe that that's the right thing to do. But bottom line is creating divisions around that doesn't work, so yeah, I'll put a mask on if the other person's really, really worried about it. And that's just an act of kindness, even if I'm pretty sure it's not going to do much for me. And like I said, you may be very in favor of those, this isn't about whether they work or not, it's about how do we reduce divisions in society with kindness?

John:

That's exactly right. That's exactly right. And it's got politicized, somehow it's a political right to do this or that. Let's just take care of each other, respect each other. We don't have to fight about masks.

Dave:

Yeah. And this is a call to everyone listening to the show, guys, I know some of you are in favor of masks, some of you are against masks. I don't actually care, just don't be a dick about it. You don't have to have your airplane turn around because of that. I think it's hilarious if you put a pair of panties on your face instead and say, "Well, I have a cloth covering my mouth." Fine, you followed the rules and you pointed out that you thought they were absurd, but you followed the rules enough that the people trying to get shit done, got it done. So anyway, there's my little PSA, just don't be a jerk, whatever side you're on.

John:

I sign that petition, let's find the common ground. There's so much common ground that we want for our families and ourselves, and let's stop fighting about out the fringes and talk about how we can make it better in the middle.

Dave:

And that's where most people are, most people listening. And I've just made it a point on this trip to really have a lot of conversations with people, and the vast majority of people are in the middle. It's only four to 9% on each end. And you look back in Germany, 9% of the population were party members, that's all it takes is 9% crazies to throw things sideways. And that's something we've got to fix, is make society more resilient to the crazies on the fringes. Don't know how to fix that one, but maybe we can just spot them better and give them therapy, I don't know.

John:

That may be the biggest health issue of all right now.

Dave:

I believe it is. And there's some other more mundane, less existential things that are worth talking about in the behavior of the pharmaceutical world. One of them is off-label marketing. And you write about this in Sickening, that's really interesting. Tell me what off-label marketing is and why it's a problem.

John:

Yeah. So off-label marketing, when the FDA approves a drug, it means that doctors can write prescriptions for that drug, and the FDA approves the drug for certain indications, it doesn't approve the drug for all indications. So for example, when Neurontin got approved back in the 90s, it was approved as a seizure drug, a second line seizure drug, and then it got approved for post herpes zoster pain. Just those two things. But the company marketed it, this is in my book, this is second chapter in my book, I was in litigation, and let me tell you the punchline of the litigation was that the jury found that Pfizer had committed fraud and racketeering in its off-label marketing of Neurontin, and the jury fined Pfizer \$42 million, and that got tripled because of the racketeering charge. It was the first time a drug company had been found guilty of racketeering.

But what Pfizer did is they got this drug that was a so, so seizure drug, and worked somewhat to reduce the pain of neuropathy, post herpes zoster, but they decided that they could make a lot more money if they marketed it for neuropathic pain, for diabetic neuropathic pain and back pain and postsurgical nerve pain. And soon, most of their drug, 90% or so, was being used, prescribed for off-label indications and used for off-label indications. The problem with off-label prescribing is that the company hasn't taken its request to have the drug approved for that purpose through the FDA. So the FDA hasn't gone over their studies and said, "Yeah, it works for that, and it provides more benefit than harm." So that data doesn't exist, but Pfizer went out and marketed the drug as if it worked for the off-label indications.

And about 90% of the drug was being prescribed off-label, and Pfizer made a whole lot of money by selling doctors the idea that they should prescribe Neurontin for neuropathic pain, for migraine headaches, for bipolar disorder, but there wasn't evidence. And because we were in litigation, I got to go through all the data. I worked with a statistician and we got the data and we analyzed the data and we saw how Pfizer had monkeyed around with the data and changed it and changed the analysis to make the drug look good. And the jury got it, that this was not okay, that this was a disservice to the public.

Dave:

One of the problems now that some drug companies are paying more attention, is that drugs that doctors are allowed to write off-label prescriptions for. And in fact, it's a primary thing a good doctor will do, they'll say, "Well, this drug also has this effect. Since you have this weird thing and the normal drug didn't work, let's try this drug because the risk is worth it for you and see if it works." So back in like 2002, I was failing out of Wharton Business School, and my brain wasn't working. I was actually really concerned, even in my career, something's really wrong. And I tried Adderall and it really didn't work for me, it made me just feel awful. And I said, "All right, I'm very, very interested in fixing this," I tried nootropics, which made a big difference, but I still wasn't able to hang where I wanted to.

So then I went to my doctor, I said, "I want modafinil or Provigil," the limitless drug, you've probably come across it in your work. And it was a fight with the doctor, when he saw my brain scans, he said, "Oh, no problem, let me get that for you right away. Your brain is really scrambled." But the insurance companies, they've been fighting with me for three years over paying for it and saying, "Well, you need to take the cheap stuff that's approved for this, and your drug is a narcolepsy drug." And what's the role of insurance companies in all this bad behavior?

John:

That's a tough one. You want to be able to get an exception, the drug worked for you. There's this phrase, do a trial with an N of one, meaning there's one per in the trial, you were the trial and you took

Provigil and it worked for you. There ought to be a way to have that documented so that the insurance company would cover it for you. But if you open the floodgates, Provigil was on patent and other stimulants were off patent and weren't very expensive at all. If you open the flood gates and this what happened in the Neurontin trial, where Pfizer got found guilty of off-label fraud, you open the floodgates and then the company starts to push it for this off-label use. And it's not that there's Dave Asprey, he needs it, but the other 50 people, the next 50 people probably don't. And if you open the floodgate, then you just open the advertising spigots and we're off to the races, and you can't control it.

So if it works, if people with your situation get better with Provigil, let the company invest the money and find 300 people like yourself and randomize them to take the Provigil and not take the Provigil and show that it works.

Dave:

I'm hopeful that some of the newer tech coming out will allow us to be much more predictive and have much higher specificities. You have very small numbers of people required in trials. In fact, I'm working with a couple of companies I can't mention, that are able to do that at a molecular level, that's astounding. So I'm hoping we just get much better at testing stuff to see how it works, which would solve the problem, actually in a very large way.

John:

Yes.

Dave:

And I wanted talk about a couple other things though, one of the statistics in the book that really blew my mind is you said by 2017, even though we spend more on healthcare than other countries, the death rate in the US had increased beyond other countries, that 488,000 more Americans were dying each year.

John:

Thank you for bringing that-

Dave:

Shouldn't we be losing our minds over that?

John:

Absolutely. Absolutely. I lost my train of thought before, but I was talking about how expensive American healthcare is. And for all that money, we have, if the death rate, age adjusted death rate, older populations have a higher death rate, so if you're going to compare countries, got to age adjust it. But if our age adjusted death rate were equivalent to 10 comparable countries, not cherry pick, the standard 10 countries, 488,000 Americans fewer would be dying each year. That's 1300 people a day would not be dying if our health and healthcare were the equivalent of the other wealthy countries. That means we have, 9/11 was a horrible tragedy, a world historic tragedy, 3000 Americans died that day, it was cruel, unbelievable, it changed America, our role in the world, that's happening every two and a half days because our healthcare is inferior and our health is inferior to other countries. We're losing that many people.

Dave:

So we have a 9/11, every two and a half days, and no one says anything and they eat the French fries and take expensive drugs. Wow.

John:

Right. Right. And when you talk and other folks talk about the media's not really covering things right, and they exaggerate, the media's not covering this. They're not covering that not only are we wasting a trillion and a half dollars a year, and essentially what's happened with the distribution of wages, is that the median family earning \$55,000 a year, is basically donating \$20,000 a year to the top 1%, because the wages are divvied up so much differently than they were in 1980. So the median family making \$55,000 a year, is giving \$20,000 away, and we're losing 1300 Americans a day because our healthcare is so inferior. If it were superior, if we were gaining 1300 lives a day, if we're gaining that, then you'd say, "Well, it's very expensive, it's caused some socioeconomic discord, it's tearing at our political fabric, but we're benefiting from it. And we've got a tough decision, let's talk about how we go forward." But it's a lose-lose proposition,

Dave:

Now, is it likely that the media doesn't talk about it because something like 80% of advertising dollars are from drug companies now?

John:

I think that number's too high, but I think you're on the right track.

Dave:

That's why I said something like, it's a very large number, but it might be 60 or something, but it's like astoundingly big.

John:

Yeah. I think if your viewers notice when they're watching TV, when there's a drug ad on a segment of a new show, there usually isn't a pharma critic on that segment.

Dave:

That's pretty shocking how that works. It's also pretty shocking, I doubt a lot of my viewers actually watch TV.

John:

They don't know.

Dave:

You guys know better. And by the way, if you do, I'm not shaming you, but in a hotel room, I'll turn it on sometimes, I'm like, "Oh my God, is that what people are eating?" It's like going to McDonald's and just examining the menu going, "That's not what I do." Now in your book though, and one of the reasons I wanted to interview you is it's easy to write a doom and gloom, we're all going to die, everything's effed up book, and this isn't that book, because you say that there's three steps that we have to put in place to fix this. Can you walk through those three real succinctly?

John:

Yeah, I can. The first step is that we have got to have health technology assessment. There has to be an independent body that assesses new drugs and devices and makes recommendations to doctors about which therapies are best for their patients. And we need to have cost effectiveness research, which drugs provide adequate value for their cost. Not only do we not have some formal mechanism of cost effectiveness studies, it's illegal. It's illegal for the federal government to either fund cost effectiveness studies, and it's illegal for federally funded clinical practice guidelines to make recommendations that consider the comparative cost of drugs, illegal, it's craziness. It's craziness.

Dave:

I love it that you talk about that. It's one of my biggest pet peeves. Why is the US government not allowed to negotiate price with drug companies and not allowed to do studies on cost effectiveness? Whoever put those laws in place, we need to find out who they were and be like, "You as a legislator, if you're still alive, get the eff out," and whoever paid them to do that, we need to hunt those guys down and say, "You're going to jail." That was a crime against Americans.

John:

Yep. This is in my first book. I can tell you why Medicare is not allowed to negotiate price with the drug companies.

Dave:

Why?

John:

Because Billy, Billy Townsend was the Republican chair of the ways and means committee in the House, and he forced that part of the Medicare drug coverage, he forced that on the Medicare part D. And as soon as that got passed, Billy decided he was going to leave the Congress and take a job for pharma for two million a year.

Dave:

Shocking.

John:

Just pure coincidence, pure coincidence.

Dave:

Wow.

John:

In Sickening, I make the comment that it's like he's a quarterback and he threw a pass and he ran around and caught it as a wide receiver and made a touchdown.

Dave:

We have so much of the self-dealing, the revolving door between FDA, the NIH and big pharma and the CDC, I mean, there's whole books written about that, including one of the bestselling books in the country that did not make the New York Times or any other bestselling list, by one of the Kennedy's. So whether or not you agreed-

John:

Oh, he was on the best seller list for a while.

Dave:

Oh, on the New York Times, did they actually put him on the New York one?

John:

Yeah. Yeah.

Dave:

Oh, then I take that back. The New York Times has some standards. I've been on the list four times, so thank you, New York Times, please don't ban me for this, but their standards are not always sales based, we'll put it that way. So I apologize, I was actually wrong about that, so thank you for correcting me. Now one-

John:

Do you know that Robert Kennedy, I disagree with his conclusions about vaccines, but for any of your viewers who have his book, look at it, and the first words in his book, in the introduction, are a quote by me.

Dave:

I missed that. I got the pre-publication version of it, and I don't think it was in the one that I read. Oh my goodness. Well, that's an honor, at least in some circles. And look, there's bad stuff happening, but it doesn't mean that there isn't good stuff happening, and it doesn't mean everyone working for big pharma is bad. And we tend to be so polarized right now, so that's where I'm working on just staying in the middle and being curious about stuff, because that's what usually leads to freedom.

John:

Yeah.

Dave:

Okay. Now actually, two more short questions for you, as we wrap up the interview. If you had a paper from big tobacco and a paper from big pharma, which one would you trust more right now, if it was brand new paper?

John:

Oh boy, would you rather get you shot or hang? I would trust them the same because it's commercially sponsored research. We have turned over the production of knowledge to commercial interests and we don't oversee the integrity of the science adequately. So in effect, we've gotten to a situation, I talked about the pre enlightenment scientists and the folks who started the Royal Society of London and said,

"We need to free ourselves from the authority of the church." And now we've got, whether it's ... you said big tobacco, big tobacco or pharma, which one would I trust? And I would say that both of them are subject to the authority of capital, it's not the authority of the church, it's the authority of capital. And their job is to maximize the returns to their investors, and they'll do it as best they can until the penalties for doing whatever they're doing are greater than the money they're making for their investors. That's what's going to happen.

And as a nation, we've got to acknowledge that, that you do need some rules in society. And though government is near an all-time low in trust, you can't do it without a government. You need a government, there's not another mechanism. We need to reconstruct a government that's going to oversee the public welfare.

Dave:

We do indeed. And it's funny, and my answer for that medical thing would be a little different, I would actually trust the big tobacco paper more, without having read it or anything else, just looking at where the source is. In part, because I've talked with some pharmaceutical execs, including a former head of the FDA, I've also met with the head of research at Philip Morris, or now known as PMI, and I actually have met with several of the executive committee there. I'm, by the way, a poster child for pharmaceutical nicotine in very low doses working for Alzheimer's in clinical studies, lasting 30 years, that's low cost and effective and all that. But talking with the company, they have been so beaten down by lawsuits, not just Phil Morris, but all big tobacco companies, been so beaten down by lawsuits that they actually have a healthy respect for publishing data. They're not going to do it again because they got the black eye and it hurt.

This has not happened to big pharma yet, and it may, and if it does, and big pharma executives realize, you know what, we are accountable, and the future of our industry is at risk if we do not toe the line. What I saw and I got a pretty good look at big tobacco, I looked at some of the research and all, I found integrity in it, which I am shocked to say here. And they were, by the way, saying, "You shouldn't smoke, it's not good for you. Here's a way to reduce harm. Here's our anti addiction strategy." And meanwhile, here's all the other science that's in there, and they still have an incentive to sell you tobacco, I'm not an apologist for them, but I'm just saying they were, especially in Europe and the west, wary. And big pharma right now isn't wary, they're partying, they're laughing and they're smoking cigars they lit with our \$100 bills. And that, we have to do something about.

John:

Correct.

Dave:

The second thing that I would want to know from you, and the final question here is where do you go to get good data? Is there a journal that you trust more than others? Is there a place you go?

John:

That's a very good question. And having had the privilege of getting inside those computers and living inside those computers for 10 years, it's hard to come back out and be dependent on what everyone else is reading. There are some journals that do a particularly good job. I think the British Medical Journal, does a good job, and JAMA Internal Medicine does a particularly good job. There are some organizations that do a good job. The People's Pharmacy, PharmedOut, there's a Canadian organization called The Therapeutics Initiative, the University of British Columbia Therapeutics Initiative.

And if your listeners have questions, if you want to know the truth about statins for prevention of heart disease in healthy people, Google The Therapeutics Initiative statins for primary prevention and you'll get the best data that's available. So all of these sources provide the best data available, but if you're not in litigation, you're not having peer review, because you got to have one side have access to all the data and have statisticians and geeks who know how to practice medicine and marketing people and economists, and have the other side have their bench of experts and have it out, and that's the only time that I've seen peer review really work.

Dave:

Wow. That's a big statement. Kind of a follow on to that, how did you feel when Pfizer said that they wanted 75 years to publish all of their data on vaccines?

John:

You just have to laugh. You just have to laugh and say that they think they can say that. I mean, they're smart people, they know how to run a business, that they can say that, and not just have a national strike against Pfizer products until they show their data. It shows how far down the road we are to being hypnotized by them, thinking that they can get away with this. And they can get away with it, unless, go back to the third part of the solution here, they will get away with it because they have so much political influence and they have so much media influence and PR influence to manipulate our thinking. There's three constituencies that need to get together to take this on.

There's the doctors who aren't getting good information and they can't practice the kinds of medicine they think they're practicing. Very few doctors are taking big money from pharma, it's not because they're getting paid off, it's because they've been taught where to get their information, and the paradigm is that evidence based medicine will provide your patients with the best care. It's how they've been taught and they need to have the courage to step back and see the system isn't working, that we need transparency of clinical trial data, and we need the results overseen, the integrity of those results overseen.

So we've got the doctors who can't practice, we have non-health care related business that aren't competitive globally because they're spending \$4,900 per person more for healthcare than the other countries, the other wealthy countries are, the companies in the other wealthy countries. So big business needs to get to be part of this coalition. And the most important thing we need is the consumers, because 1300 Americans are dying because our healthcare isn't doing its job, daily, and the consumers need to get into it. And if those three constituencies can get informed, understand how serious this situation is, and act together, they can overcome the power of the pharmaceutical industries. And this is a real test of our democracy, to see if this can be achieved. If it can't be achieved, I think we're in even deeper trouble than it appears.

Dave:

You and I both, I think this is an existential crisis for the United States. It has reached that point. There are enough people who have lost their children, who've lost their parents, who've looked me in the eye and said, "They killed my ..." and they know it happened. And fortunately for the people in charge, these are sane people. And one thing we don't talk about very much about the US that's different than most countries, and we talk about the half-life of a drug in the body, how long does it take for half of it to go away? The half-life of guns is more than 100 years, and there are more guns than people in the US, and that is a fact. If you're in the government in the US, you have to account for that. So you have to do your

job and change that 1300 per day, because there's some crazy people out there who are going to figure this stuff out.

And I don't want to see what they're going to do, I'm not calling on this, I'm calling for the opposite of this, but we got to fix the problem because it is creating not just death, I'm less worried about that, it's the 40% of people who aren't dead, who are suffering greatly, both economically and personally and health wise, in chronic pain, basically in helplessness because of this garbage behavior from frankly, people who should know better. And your book just highlights that so well, but you have a solution in there, which I also really appreciate, John. Thank you for writing Sickening, I think it's a great book, and I hope my listeners really do read it and take action on it.

John:

Well, thanks so much for the opportunity to share these ideas with your listeners, it's been a real privilege.

Dave:

If you like today's episode, seriously, read Sickening, not to feel sickened, you won't feel sickened, but you might feel like there's something you can do about it, and there is. And you can listen to the show, you can read some of my books too, you can join the Upgrade Collective because we had about 42 people in the live studio audience today, listening to this, helping out. Thank you, Upgrade Collective members, that's Upgrade Collective mentorship membership group, people were extra interested and they got access to this before you did, when it hit the airwaves. John, thanks again.

John:

Again, thank you.