The Powers Report Podcast

Episode 34

What Vietnam, Castles and Climate Change Have to Do with Covid-19

Welcome to The Powers Report Podcast. I am your host, Janis Powers. The show brings you candid, unique and data-driven perspectives on the health care industry. I believe that any solution that is going to positively impact the American health care system has to satisfy two major criteria: financial viability and behavioral incentive alignment. In other words, access to high quality care can only be achieved if we can afford it, and if we behave in ways that optimize our health. Please subscribe to our show on your preferred podcasting platform and connect with us on social media. Again, this is Janis Powers, and welcome to The Powers Report Podcast.

We are well into the second year of living with Covid-19. By now, we're sick of it but we can't stop talking about it.

It's interesting to consider complex issues, like Covid-19, in the context of other, familiar issues. That is exactly what this show is about. I'll be comparing the pandemic to things that the situation seems to have nothing to do with, so maybe we can get some perspective.

I'll talk about five topics. I'll start with something lighthearted. The War in Vietnam.

Vietnam is the first war that America lost. I'm not sure every historian would call the war a loss, since it wasn't the kind of war that the American military was used to fighting at the time. Which is exactly my point. But I'll get to that in a minute.

The war in Vietnam was a proxy war. Communist-led North Vietnam was fighting not-Communist South Vietnam. We sided with the south. You think we would have learned from our own civil war that the south was going to lose, but alas, we dragged ourselves into a messy conflict that spread all over Southeast Asia under the pretext of fighting the Commies.

There are some pretty good movies that have been made about the war, if you want Hollywood's version. The best, by far, is *Apocalypse Now*. If you had to read Joseph Conrad's *Heart of Darkness*, you'll recognize the plot. *Apocalypse Now* was directed by Francis Ford Coppola, who also helmed classics like *The Outsiders* and oh yeah, all 3 *Godfather* movies.

Anyway, as in the Vietnam war, our fight against Covid-19 is against an enemy we don't understand. In Vietnam, the military had to deal with guerilla warfare. No more blowing up obvious targets with superior weaponry. Oh, no. Soldiers didn't know where the enemy *was*.

We were in unfamiliar territory using weapons that, as powerful as they were, were not suited to the job. In other words, we were fighting the enemy with our rules in their territory. Did I mention that we lost?

We're doing the same thing with the coronavirus. We think that we can defeat it with our powerful drugs. Vaccines are our napalm. We're trying to use chemicals to knock this thing out. That seems, to some, to be the thing to do right now. Let's just hope that the vaccines don't manifest into a Covid-19 version of Agent Orange.

Let's stick to the war theme and shift back a few centuries to medieval times. Let's talk about castles. And by castles, I'm not talking the fancy ones where princesses live. I'm talking about military fortresses. The piles of stone set high atop strategically located hills, overlooking the surrounding valleys and plains so as to detect the approaching enemy a long ways off. Those castles.

I have a thing for castles. I majored in architecture in college and have a master's degree in architecture. I took some pretty funky electives over the years including a seminar on medieval military construction. And let me tell you, those folks centuries ago had some pretty slick design skills.

Castle fortresses, by their nature, are defensive edifices. They were meant to keep people out. All kinds of architectural elements were deployed. Obviously, we all know about the moat. One castle in the world that was never defeated is Mont St. Michel. It is a church and castle built on an island off the northern coast of France. When the tide goes out, one used to be able to walk to Mont St. Michel. But it was far enough out that enemies couldn't get their attack equipment out there to use it. Try rolling a canon in the wet sand. The tide would come back in, the enemy would scatter. Mont St. Michel was forever protected by a tidal moat.

Most fortress castles used the standard thick walls, built as tall as they could make them. They had well placed arrow slits. More advanced designs had machicolations. These were openings in the base of corbels or overhangs on the fortress walls. Defenders would slide back the floor and dump stuff like boiling water or hot oil on the would-be intruders. I don't know any medieval profanity but all of it would have been deployed by an intruder hit with a hot oil shower.

That being said, all you need to win a battle with an enemy huddled up inside a castle is time. If you were outside the castle, you needed to make sure you had enough resources to wait out the people inside. Soldiers could become restless. They were living in tents. Imagine being out in the rain, outside some rocky monolith, just waiting. But they had the freedom to get reinforcements. Those inside the castle did not.

Everyone knew this, particularly the castle designers. They supplemented the fortress with additional defensive mechanisms, assuming that the castle would be breached. In other words,

they designed it knowing that they couldn't just try to keep the enemy out. They had to protect themselves once the enemy got in.

All kinds of tricks of the trade were employed. There may have been multiple walls to break through. Once inside, walls may have been constructed forcing sharp turns. This would have made it almost impossible for horse-drawn weaponry to navigate into the fortress, plugging up the entry point, allowing for plenty of defensive maneuvers.

The Covid-19 strategies we're hearing about are analogous to building super thick fortress walls. We're doing everything we can to keep the virus out of our bodies. Vaccinating. Mask mandates. Lockdowns. Social distancing. Yet the virus is highly capable of getting into our bodies, as demonstrated by the tens of millions in the U.S. alone who have tested positive for it (1). And those are just the people who've been tested. We know that plenty of other people have had the virus and were asymptomatic and never got tested, so those numbers aren't in the count.

We'll never know the number of people who were exposed to the virus and *didn't* test positive because their natural immunity fought it off. We're missing a huge piece of data, because getting exposed and not testing positive means that the virus got into someone's body and the body defeated it. The immunity system is miraculous.

Obviously, not everyone's immunity system is going to be able to fight off the virus with such effectiveness. People are still getting sick and they will continue to get sick. What are we doing to treat people once they're infected?

This was a hot topic when the virus erupted all over the global health care system. People didn't know what to do. Different strategies were devised. You may recall we had this massive ventilator shortage. Doctors have made remarkable strides in getting treatments in place. But there's still so much to do.

For example, it seems like there is some sort of genetic anomaly in certain people that causes them to have a severe reaction to an infection. I'm talking about the super healthy, non-immunocompromised people who die. Why aren't we doing more to identify the genetic tweak that these folks had so we can test others for it? If we don't offer that test to the general public – because I guarantee you people would like to know – we could at least test people once they showed up in the hospital. I imagine their course of treatment would be different than the other folks who are hospitalized who are significantly immunocompromised.

Also, why, oh why are Covid-19 patients still spread around different hospitals in the community? Some hospital systems have centralized their network's covid cases into one facility. But many cities have several hospital networks. These folks don't work together. It's clear that the hospitals want to reimbursement for treating these sick patients and that's a disincentive to let them go. It's just another way that the health care system is so broken and dysfunctional.

And what about antibody injections? What happened to that? Several companies have made progress with drugs formulated from antibodies with the hope that a super concentrated injection could help infected patients. Regeneron may be one you've heard of. Its use on infected Covid-19 patients was scuttled late last year (2). I can't speak to whether or not that was a good or bad idea.

But we know that prevention, in the form of vaccines, has become more of a focus than treatment. In fact, Regeneron may position itself as a preventive cocktail because that's where the interest and the money are (3).

Yet I hope more companies focus on treating folks who are sick because people will continue to get sick. And those who are sick can stay in the hospital a really long time, driving up costs. But then again, if you're a hospital, that's what you want. The sicker the patient, the more you get paid. It's just another way that the health care system is so broken and dysfunctional.

OK. I'd like to take you back in time again. Let's go back not over the course of human history, but over the course of your personal history. Back to elementary and middle school when you learned about the Scientific Method. This is the backbone of scholarly research and discovery. To refresh, here are the basic steps.

1. Ask a question
2. Do research
3. Formulate a hypothesis
4. Do an experiment
5. Study the results
6. Draw a conclusion

You probably know where this is going. Good experiments iterate. That means they repeat and repeat sections of the Scientific Method before they get to the last step, #6, where they draw a conclusion.

The U.S. Food and Drug Administration (the FDA) has its own version of the Scientific Method. There are five phases of clinical trials (4). Phase 1 is Discovery and Development, which is researching the drug in labs. Phase 2 is Preclinical Research, where the drug is tested, sometimes on animals, to see how it works. Phase 3 is the tough one. That's Clinical Research, where the drugs are tested on people. Then there's Phase 4, the FDA Review. That's got bureaucracy written all over it because a vast governmental agency has to approve something. The fifth phase is monitoring, to make sure the drugs are safe when they are used in practice.

This process takes about ten years, give or take. A lot of time can be taken up in Phase 4, with the government review. But it also takes time to do tests first in the lab, and then on people. And if you don't get the results you need, you do the experiments over and over to learn more so you can get to a robustly researched conclusion.

Covid-19 vaccines were expedited for approval by the FDA. They didn't have rigorous analysis before they came to market.

The drug companies can argue that some of the steps had been in place already. Why? Because Covid-19 is a coronavirus, just like the common cold. Companies have been trying to find a cure for this for decades, so there's certainly been some preliminary work done to shorten the vaccine timetable for Covid-19.

Although it does make you wonder why suddenly, after all these years, pharmaceutical companies have cracked the common cold nut. But I digress…

The part you can't argue is the shortened timetable for the experimental phase on people. It's like the drug companies went straight through the Scientific Method without iterating. They got to a conclusion and ran with it.

Some call that science.

But let me bring up another important point, and this gets to the first part of the Scientific Method, "Ask a question." If the question is, "Will our drug reduce the rate that people will contract the strain of Covid-19 that this vaccine has been designed for?" then the answer is "Yes." That's based on a non-rigorous approach to science, using data we have right now. But it's a yes to that question.

How about if we ask this question. "Does this vaccine have long-term side effects?" Well, we don't know yet.

And how about this one: "Is rapidly deploying the vaccine the best way to stop the pandemic?" It seems like the powers that be think the answer to that one is yes, because that's what we keep hearing. Yet there is no way to know the answer because this question has not been tested in the Scientific Method. I would argue that we are only part of the way through it. We got the question and research was done. Meaning, people looked at the studies from the clinical trials. Then they went to the third part.

The third part is to make a hypothesis. Hypothesis is a fancy word for guess. Let's make a guess, and then test it out with an experiment to see if it works. Experimentation is Phase 4 of the Scientific Method. Which means that the American population is partaking in a massive experiment to answer the initial question: Is rapidly deploying the vaccine the best way to stop the pandemic?

Some people think it's worth the risk. Others don't. We can't say for sure which one of us is correct, because this is an experiment.

Now I get that in times of crisis, leaders can't move with 100% certainty. They make hypotheses – guesses – all the time. In fact, most of the time. Every time the Commander-in-Chief has to make a military strike, he's guessing. Guessing with different levels of certainty, but guessing, nonetheless.

My problem with how the vaccination strategy has been handled is how the American public has been misled about the facts. Look, this situation is a mess. There's no playbook. But don't railroad people into doing something they have every reason to question when we're dealing with hypotheses – guesses – not scientific fact.

Which brings me to another science-related topic: climate change. Yes, some people don't believe the planet is warming up. Melting icebergs be damned. But that's for Al Gore or Leonardo DiCaprio to debate. What I want to talk about is the futility of one country doing everything they can to stop a problem that impacts the entire planet.

Environmental regulations are essential to ensuring a healthy community for humans and all the organisms that live symbiotically on earth. Ask the people if Flint, Michigan how they feel about it. There are countless stories of pollutants and contaminants negatively affecting the environment. There's too much pollution and plastic. And maybe, there are just too many people.

In any case, the United States – or any country for that matter – can implement rules that affect their populations. That's one of the reasons your car has to be inspected every year. These rules can have a significant impact on a local community. Think about what happened in Los Angeles in 1984 and in Beijing in 2008 when each city hosted the Olympics (5). Efforts were put in place to reduce traffic and even cut back on factory operation – they worked. For short periods, smog and pollution abated.

Getting everyone to agree to reduce traffic and cut back on factory operation at the same time for a long enough period to make a difference across the globe is impossible. The environment almost always comes second to the economy. In other words, countries aren't going to sacrifice money to make the grass greener. Yes, there is a push in America and in Europe to do socially-responsible investing. But there's no universal agreement about pursuing these investment policies. The impact of these programs is local or regional – even if there are regional benefits in locations in different countries.

Sacrifices need to be made for the world to work together to impact climate change. And if someone opts out, especially a big country like China, India or Brazil, then their negative behaviors can undo many of the sacrifices undertaken by everyone else.

Now consider the effects of one country going whole-hog to eradicate Covid-19. It's obviously good for them to do on a regional/country level. But if the virus is brewing elsewhere, it will find its way back to the country that thought it had eradicated it.

I'm not saying we shouldn't do our best to stop global warming or to combat the pandemic. This is more of a philosophical observation. What does it mean to be human when we're presented with crises that only a unified, global human response can defeat? We're fallible. There are forces greater than we are. That doesn't mean we give up. It means we should face

these crises recognizing that we cannot control everything, we cannot protect everyone. We cannot live in fear.

Which brings me to my final point, which is less analogy and more observation.

All of this is Facebook's fault.

They're so easy to blame, that Facebook company. Facebook has put a mirror up to the ugliest parts of human nature and reflected it on everyone else. Negativity, fear-mongering and lies. In your feed. All the time. That, along with cat videos, family photos and awesome memes for everything from cheating on your diet to being cheated on by your partner.

Of course there are positive elements to be reaped from Facebook – and to be fair, many other social media platforms – but fear sells. You don't need me to explain the negative aspects of social media. However, I think its role in Covid-19 hysteria is understated and it's definitely made things worse than they should be.

One of my biggest points of frustration is when regular people start "docsplaining" issues to other regular people. Like, they've heard a doctor – and Lord know what kind of a doctor it is or where they got their information but because they're a doctor, it has to be true – people have heard a doctor explain some technical issue about health. Magically, watching a video confers years of medical training and expertise onto the viewer. It's ok to listen to understand, but don't listen and pretend you're an expert. If you've never used the words platelet, thrombosis or adenovirus vector approach in normal conversation, don't start now.

This reminds me of a conversation I had with my late grandmother. For the early part of her married life, she lived with my grandfather in Billings, Montana. Not quite 100 years ago, but close! Montana is still wild country but imagine what it was like back then. Well, I'll tell you. There were a lot of bears.

For the heck of it, I just googled Montana and bear and apparently, someone was mauled by a bear in Montana last week (6). What a terrible way to go and condolences to his family. According to my late grandmother, this was an exceedingly common occurrence. When we talked, and this was a few decades ago, she said these events went unreported because there was concern that they'd scare people off.

Was that an underhanded thing to do? Just not report stuff? Or is over-reporting and repeatedly circulating one-off stories worse? It's one thing to hear about a bear mauling. But when you hear about it 15 times the same day, it gets to feel like there were 15 bear maulings.

Which is why, when freak Covid deaths happen to otherwise really healthy people, its likelihood is magnified on social media. This fear influences the perspectives people have on what is the best approach to take in combatting the virus.

In the end, we'll find out the best approach when all of this is over. No matter what your views on how to take down Covid-19, you can be sure it's not going anywhere for a while. We're

going to have to figure out how to live with it. Your best bet is to stay positive, be respectful and most importantly, be as healthy as you can be.

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