END THE TRIBAL WARFARE

Creating Productive Conversations Between the Vaping Industry and Public Health

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THE ART OF CHANGING MINDS

One evening last summer, I attended a reunion event for Harvard public health alumni near where I live, in San Francisco.

I listened as a young recent graduate talked to me about vaping, how bad it was. How diacetyl causes popcorn lung and so on. She didn't know what she was talking about.

But I had a little epiphany about changing minds.

Since we're here at a Harvard alumni event, she knows I'm a member of the same tribe; she can assume we share values and goals. If I offer information contradicting her beliefs, she'll listen.

But what if she knows I've consulted to industry—how do I show her I haven't defected, that I'm still a member of our tribe in good standing, so she'll still trust what I say?

And what might someone from industry say to correct her misinformation that would actually get through to her? She might become indignant and self-righteous. If data collected by industry was introduced, it might be dismissed as tainted.

MAKING A COURSE CORRECTION

The narrative around vaping, initially so full of hope and promise, has taken a wrong turn. Industry and public health people can seem like mistrusting, warring tribes.

How can we open up cracks in hardening misperceptions and start real conversations?

One obstacle is how "public health people" view "industry people."

Not long ago, for a consulting client, I reviewed the transcripts of meetings that the FDA's Tobacco Products Scientific Advisory Committee held with several companies seeking modified risk labeling. This was for products such as IQOS and Camel Snus.

I was looking for patterns, lessons from past failures that might increase the odds of future success. Especially, what went right and wrong with presentation of behavioral science information by industry to the TPSAC advisors.

It was much more interesting, even entertaining, than I expected. There was so much emotion in some of these pages; I felt like I was reading a play.

I saw that the quality of data in many ways took a back seat to issues of trust. With a very tribal feel. Now that "Big Tobacco" is moving toward harm reduction—a revered concept for many in public health—are we on the same side?

Many industry folks I meet have worked on reduced-harm products their entire careers. But that legacy of dysfunctional interactions between the tobacco industry and health-related government agencies has a long tail. Over and over, these meetings highlighted concerns that industry would try to sneak something nefarious past the FDA's regulatory process.

In the TPSAC transcripts, examples of past deception were repeatedly raised--usually in the form of stories that had probably been shared many times with colleagues. One mentioned reviewing decades-old industry documents as part of his FDA work, showing plans to use flavors to attract young smokers. Others told of skepticism from supposed harm-reduction innovations that weren't. Such as, "I'm 35 years past cigarettes…but I relapsed a couple of times because I thought 'light' cigarettes were safer, and we know now that that's not true."

One example really gave me that sense of opposing tribes:

Partway through the IQOS presentation to TPSAC [transcript page 160], a physician on the panel said roughly, "When I see the word 'significantly,' statistically we have a whole idea of what that means. When you say harm was significantly reduced, what do *you guys* mean?"

It struck me that this was about "we researchers" versus "you industry guys." And that mode of thinking was coloring everything the TPSAC reviewers heard. Are we on the same side of the table, or are we members of warring tribes? Are you fellow scientists or are you Big Tobacco?

The emotional hangover from decades of demonizing the tobacco industry, especially combined with all the recent media fear mongering about vaping, creates a major obstacle to working together toward harm reduction.

Another barrier is the way members of my public health tribe view ourselves.

We assume because we are trained to conduct research and evaluate data, that all of our health-related opinions are driven by data.

There's an excellent NPR podcast called *Hidden Brain*. On my flight to give this talk, I listened to an episode of *Hidden Brain* called "Facts Aren't Enough." It discussed research on the "social spread of beliefs" – that is, we get basically all our beliefs from our social channels, from other people. Most of what we know –such as the fact that the earth revolves around the sun and not the other way around–we have no direct evidence of. We have to trust others who got that evidence. We decide which people we trust to tell us the truth, and what beliefs we'll take up.

It reminded me of my experience doing research at Harvard Medical School on video game violence – basically, a congressman with budget authority was worried about the effects of *Grand Theft Auto* games on society, and I got a seven-figure grant. I was disappointed to find that most of the research on media effects on youth frankly was shoddily done, and often appeared to be driven by bias. And that this research had sort of infected my otherwise intelligent colleagues. Who would say things to me like, "Violent video games… they cause aggressive behavior!" Or, "Don't video games cause school shootings?" Actually, no. (If you're interested, I can say more about this over a drink sometime.)

The point is, I came to realize that they got this information from **academic social sources**: stories from casual conversations with colleagues, article abstracts, and news reports.

That recent public health grad at the alumni event, who talked about popcorn lung…she probably heard it over coffee from a colleague, who read it someplace.

Because of our self-concept as researchers, we believe that what we think is based on science. And we often fail to recognize that we really haven't reviewed the data. That our opinions may have rickety supports.

Studies of **how opinions form** on issues like vaccines and climate change–and even on video game violence–repeatedly show one thing. When you expose people to new information, if that information *supports* their existing beliefs, it strengthens those beliefs. But if that new information *conflicts* with their beliefs, people will ignore it or discount it.

This is **confirmation bias**. We take in confirmatory data. When data doesn't conform to what we already believe, we find a reason to discredit it – such as, it comes from an industry study.

There was an article on *Scientific American's* website, called "How does the public's view of science go so wrong?" The author states that, "When their misbeliefs are challenged, laypeople take it not as correction but as a direct attack on their identity."

But the author missed the point that this is also true of scientists, and their identities and their biases. I remember when one of my former professors at Harvard, a noted expert on diet and weight loss, went ballistic about a government meta-analysis saying that being moderately overweight might be fine, even healthy. He was quoted calling the *JAMA* paper "really a pile of rubbish," said it would be exploited by snack food makers, and that basically doctors should not share the data with their patients. My old professor clearly felt attacked by this research.

In short, facts are not enough to change minds.

Another kind of barrier is just lack of information and empathy.

At the IQOS TPSAC presentation, the first presenter tried to set an empathic tone by saying, "I'm sure that most people in this room know someone who smokes. It could be a friend, colleague, or family member.…"

No. **Most of us don't know any smokers**.

Smoking has become sort of like military service in this country. It used to be a common experience, and it's now segregated into subgroups of society.

Why did the recent media coverage of dozens of deaths linked to vaping not mention the hundreds of thousands of smokers dying each year in this country? Because in our minds, those smokers don't have faces. Whereas it's easy to imagine high school kids vaping.

Most public health people don't identify with smokers. Not once during my MPH training at the University of Minnesota, or in my doctoral courses at the Harvard School of Public Health, did we ever discuss why people like or continue to use tobacco products. It was a given that smokers start because of peer pressure or family example, and they continue because they're hooked, or can't grasp the risks.

That's one reason reviewers focused so intensely on *any* youth or nonsmoker uptake of modified risk products, even if the numbers will be small compared to lives saved by switching to those products.

I must say, **I have no idea what device is in this photo**. I chose it at random to make my point.

In the IQOS TPSAC meeting, one reviewer got clearly frustrated, saying, "You have the charger and the sticks, how is it all packaged? And where would the labels go, and what do they carry with them when—you know, what does this look like?" The reviewers didn't understand the reality of this technology they were being asked to vote on.

You can't go wrong assuming public health people have zero clue about nicotine-delivering products, whether old or new. Things like snus pouches are exotic to my tribe. It's embarrassing how little we know. It puts me in mind of politicians railing against the evils of violent video games who never even played one.

The companies seeking modified risk labeling may not have thought about what's at stake for the researchers and clinicians on the other side. The TPSAC panelists have what might be described as "**asymmetrical personal risk**."

In other words…If a TPSAC reviewer is right, if she correctly identifies a lower-risk product as such, she gets little professional benefit. But if she's *wrong*, and identifies a high-risk product as lower-risk: that could kill her career, or cause huge personal embarrassment.

If TPSAC panel members don't feel both scientifically convinced by and emotionally comfortable with both the contents of the application and the people who are making it, they will default to the safest response: rejection. That may explain why modified risk applications that looked like no-brainers to industry folks kept getting rejected.

An ordinary-sounding phrase from an application, like, "the level of exposure to this constituent is below the level of concern," comes across very differently in this light.

Remember, the nightmare of TPSAC members is to say, in effect, "Yes, industry misled us for years about safer products that weren't, but this one really is safer!" Only to see headlines about novel carcinogens in the product they voted yes on.

All of this is made more difficult by what's sometimes called "conformist bias." In the US, skepticism of vaping has become the norm, in contrast to the UK. It's risky to defy the norms of your tribe. You risk being labeled a collaborator or traitor.

Hope is not lost. **There are some things you can do to help another tribe hear your story or consider your data.**

In the TPSAC meetings, it was clear that industry terminology, such as "consumers" and "taste preferences" was off-putting to the reviewers. That's not **the way their tribe talks**.

The way you approach a topic, and even key phrases you use, can affect whether someone sees you as a colleague with shared goals and truly listens to you. Whether their mind opens to let some light in, or snaps closed and labels you as the opposition.

Don't generalize beyond the data or make what one TPSAC reviewer called "very sweeping comments about the data," asking sarcastically if the industry presenter could "please share your reasons for that confidence." All studies have limitations; you gain credibility by acknowledging those limits and what's not yet known.

Be mindful of their fear of being led down a path. Discuss other approaches you considered. If you're modeling population effects of a modified risk product, tell the story about how you chose your assumptions and about different ways the data could have come out.

Walk them through your thinking. Don't "persuade."

TPSAC reacted very positively to a few industry researchers who talked through their thinking and proactively raised limitations. Those researchers felt like fellow scientists, on the same side of the table.

I sometimes do media training for academics, and I could see that some of the industry presenters had good corporate media training on how to speak persuasively. Unfortunately, this approach really backfired in the TPSAC setting.

For example, one said to the IQOS panel, "For American men and women who smoke—your friend, your colleague, or your family member—shouldn't they have access to and information about a product that's a better choice than smoking?"

Reviewers seemed to view this as marketing-speak, that insulted them by implying a false forced choice between IQOS and smoking. And suggested they should vote on emotion rather than data.

This unfortunate speaker also relied too often on the phrase, "We believe that…." In this sensitized tribal context, it came across as, "We in industry believe—and you should take our word for it!"

*Be mindful of **tribal values**, such as extra emphasis protecting vulnerable populations like children and teens. Also low-income or low-literacy groups and historically disadvantaged minorities; that's why menthol can be a touchy issue.*

Public health people in particular value evidence of practical real-world significance—not just statistical significance, which can be manipulated. They also like examples of effects on real people in real-world situations, not just controlled trial situations. So that's a credible way to frame anecdotal information.

Research demonstrates the power of stories, especially stories that elicit emotion, to change minds, and that data then confirms those beliefs. Even so, it's wise to speak in ways that support the **tribal self-image**: that they make their decisions solely based on science.

In the mid-2000s, I worked with PMUSA, now Altria, to research and develop smoking cessation and youth smoking prevention materials. A Harvard colleague of mine told me that PMUSA had hired a Ph.D., who was giving grants to address youth risk behaviors. This was a hot area; research showed that risky behaviors, including smoking, tended to cluster together. My colleague, a trusted friend, had gotten funding to do public outreach through radio. He encouraged our group, called the Center for Mental Health and Media, to meet with his funders.

I still remember how I felt walking into the Philip Morris USA headquarters, then still in Manhattan. You know how PETA protesters used to throw paint at people in fur coats? I felt like some lurking critic would spot me and dump an ashtray over me. How could I even *talk* to the tobacco industry?

We listened to a PowerPoint presentation from people working in corporate social responsibility—some of them at the top ranks of Altria today. They probably felt as disconcerted as I did. I thought of strange dogs sniffing around each other: Are we going to fight or play?

Eventually, we played. I headed the QuitAssist project and my husband, Larry Kutner, helmed the Youth Smoking Prevention group. Over time, working together, I got to know these industry people. As people. I mentioned that public health folks don't know smokers, don't picture them as faces but as statistics. Now, for me, "Big Tobacco" had a human face…faces I often liked a lot.

Sometimes other academics who learned about my work would ask accusingly, "How can you work with a tobacco company?" Basically, was I a traitor?

I would walk them through my experiences and my motivations. I talked about the extensive research underlying our work: Philip Morris could afford to do it right, from focus groups to mall intercepts.

I talked about their unprecedented reach: PMUSA controlled brochure racks on convenience store and pharmacy countertops, and could staple brochures into major magazines. Seventy-five million youth smoking prevention brochures. And hundreds of thousands of QuitAssist guides going to homes and doctors' offices.

All content data-driven and carefully footnoted. And if industry behaved unethically, we could observe it and report it.

So how did my listeners react, once I told my story? Most often, they'd say, "Well, I might not have made the choice you did. But I understand now why you did it."

My husband and I also have worked with Juul. When my husband gets shocked or skeptical looks, he tells the story of how by the time he was 18, both his parents had died of smoking-related cancers. He points out how different his childhood might have been, if products like Juul had been available then. People don't say anything after that.

Keep in mind the fear of losing face with the tribe. A story provides cover as well as perspective. What will the TPSAC reviewer, the day after her vote supporting a modified risk product, say to a colleague over coffee to justify that vote?

Let's look at how these principles work through the lens of another stigmatized product, from another vilified industry: GMOs.

Even though most scientists see genetically modified plants as safe and rather ordinary, many members of the public see them as an unnecessary risk, or coin slurs like "Frankenfoods." And they see "Big Ag" companies like Monsanto in a way similar to that Big Tobacco stereotype.

Are any of you fans of Bill Nye the Science Guy?

Earlier this year, I ran across a podcast from *Business Insider*, then called "Household Name." And there was an episode labeled, Bill Nye the GMO Guy.

It turned out to chronicle the process of how Bill Nye changed his mind about GMOs and Monsanto. I got fascinated by this, and looked up other things he wrote, piecing together the process of *how* he changed.

At the start, he didn't see the need for GMOs, and feared they could harm the environment.

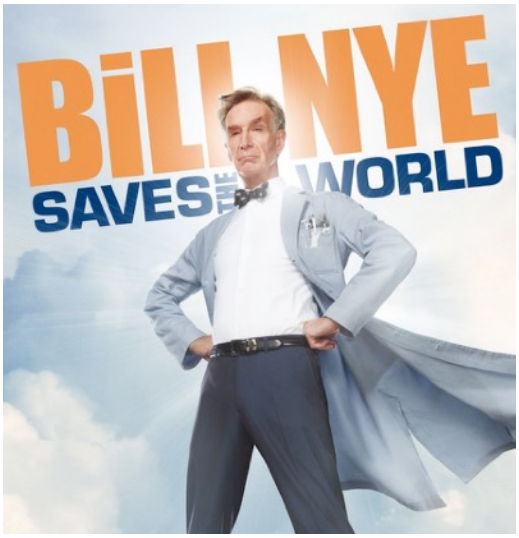
He talks about attending an "Intelligence Squared" debate on GMOs, and being invited, sort of dared, to visit Monsanto's headquarters in St. Louis.

He agrees to go there, as he says, "with arms folded, like show me, like prove it…. I mean, these guys made Agent Orange, for crying out loud."

They walked him through their greenhouses, their state-of-the-art gene sequencing machines. He saw plants attacked by pests, and plants protected by changes Monsanto made.

By the end, he was answering the skeptical podcast interviewer's questions about potential GMO harms with stories of change. Phrased like, "So this is exactly the kind of thing I was worried about…but that's absolutely not right."

Meeting and talking with Monsanto's scientists, he clearly started to see a common bond, people who may be on the same side. Perhaps reducing the need for pesticides, for example. He sought out and read more research on GMOs. Over time, he became convinced that GMOs support farmers and are the best way to address the global hunger crisis.



Bill Nye just launched a new podcast called, of course, ***Science Rules!*** The November 20 episode was OMG, GMOs! Bill has the retired chief technology officer of (gasp) Monsanto as his guest—the guy he met at the debate, who started him changing his mind.

Before we can start judging his guest, Bill immediately sets the stage by saying, "Now, Rob, you grew up on a farm," allowing his guest to talk about his story and motivations. Painting a picture of growing up understanding where food comes from and the challenges farmers face, and feeling a sense of environmental stewardship. So he becomes not a corporate title to us, a Monsanto CTO, but Rob, a pro-environment farm guy scientist who was hired by Monsanto. He's got a human face.

A caller, who said he was a science educator, asked Nye to walk listeners through the process of how he changed his mind on GMOs to help others.

It turned out Nye's original views on GMOs came not from reviewing research, but from stories his sister told. She'd been an au pair in Australia, and brought back horror stories about bad effects of "introduced" species like cane toads that "just made a mess out of the Australian ecosystem." Later, when he did his *Science Guy* show, he talked to experts about the importance of diversity in ecosystems. How more diverse means more robust. He came to believe that "you got diversity by letting things just happen, letting nature take care of itself. So I had the impression…" that introducing new species or genes was akin to "an invasive species." And that "there's a chance of unintended consequences."

In other words, anecdotes and abstracts fueled beliefs and values, and led to a conclusion: that GMOs were a bad idea.

Bill Nye collaborating with Monsanto is an example of what's been called an adversarial collaboration: inviting members of rival tribes to work with you on a controversial issue. Collaborations between groups with different beliefs and backgrounds (such as industry and academia) can help to humanize adversaries, to reduce bias and blind spots in research design, and to credibly spread information beyond the same closed circulating pools.

Another conference speaker mentioned the new National Youth Tobacco Survey data showing curiosity outranked flavors as a youth motivation to vape. What a difference it made in the NYTS to have a smart person, who had perhaps gathered anecdotes in focus groups, include a wider variety of response options in that survey. That's how we got the story that curiosity tops flavors. And that doing vape tricks ranked right up there with flavors.

Diverse collaborations make it more likely that people will understand the products and the users enough to include all the options, and get the full, true story out. We also need more qualitative research to give us stories to tell. And to understand how others change their minds, including in what we think in the wrong direction.

I recently attended a lecture on vaping at Stanford, part of a maternal and child health lecture series, and unfortunately heavier on accusations than data. The lecturer said in passing that she used to believe that vaping was safer, but no longer does.

I wanted to take her out for a coffee and ask her, "Why? What's the story of how you changed your mind?" Such stories could tell us a lot about where and how to intervene.

https://www.drcherylolson.com/smoking-cessation-and-prevention/