**Public Health Versus the Truth –**

**How and Where Do We Draw the Line?**

My mom, Nancy B. Fisk, was a professor of Nursing specializing in substance abuse. On several occasions in support of her activities I had attended Alcoholics Anonymous meetings. Conversing with her afterward on one particular occasion, I remarked to her that in a way we are all in the same boat, that whether or not we are addicted to some particular substance, all of us are more or less enslaved to some obsession or other. I saw my mom cringe visibly before replying to me sternly that however true that may be in theory, I should make darn sure never to share this notion with any alcoholics or actual substance-abusers, who would be sure to incorporate it into their rationalizations giving them one more excuse not to seek help.

In fact, the narrative of substance abuse counselling is based on the acceptance of certain truths as pat, the subscription to which is key to recovery regardless of whether they are absolutely true. One of them is that alcoholics never recover on their own individual effort, but only in association with a helping community. Another is that no alcoholics ever recover to the point where they can return to non-abusive social drinking. Neither of these claims are rigorously researched, and every so often we hear of anecdotal cases apparently to the contrary. I’ve heard testimonies backed up by family members that this or that one person prayed himself sober and hasn’t touched alcohol in years. One hears about people who used to drink to get drunk but now just drink socially without inebriation.

People in the substance abuse fields will typically cover these examples by noting that not all abusers are alcoholics, and that those who successfully return to social drinking were not alcoholics in the first place. This of course, might be pointed out as a case of the No-True-Scotsman fallacy, which is summarized in the following conversation:

No Scotsman wears underwear under his kilt.

But McDonald wears underwear under his kilt.

Well, then, McDonald is no true Scotsman.

Of course, to criticize the substance-abuse field for such things is ludicrous, since it is not the exact truth of these axiomatic claims that matters, but only the effectiveness of subscribing to them. After all, the ultimate concern of health care is not truth, but public health. Usually, the two coincide. But perhaps not always. It is up to us to figure out when if ever the two do not exactly coincide and how we should behave and speak in those cases.

It is not so easy to recommend suppression or dismissal of the truth for the sake of health care, since it is crucial for the health care profession to maintain credibility, and suppressing or underselling a truth based on its being counterproductive to public health can backfire if it matters enough to the population being served and they catch on. Both overselling our therapeutic axioms and underselling our acknowledgment of exceptions and uncertainties can cause us to lose our audience.

We can avoid this kind of predicament to some extent by candid, one-on-one dialog with those capable of processing it. But many who come for health care services may not be in a position to do this, due to the stress caused by health problems or lack of education or trust. What to do in these cases is perhaps one of the hardest parts of health care.

The COVID-19 pandemic has created this kind of trouble for us such as perhaps no other health in several generations. When vaccines first became available, we noted a trend of vaccine hesitancy that has stayed well above 20% of the total American population. The reasons for hesitation vary from person to person and can even change from one to another as time goes on.

One of the early reasons heard was that vaccination was not worth it unless you didn’t have to wear a mask anymore. Some of these particular vaccine-stragglers were in fact eventually coaxed in by news that vaccinated people in their area would no longer have to wear a mask.

It is unclear whether the message that vaccinated people would no longer have to wear a mask was ever sent out in order to get more people vaccinated, but it seemed to have worked, whether intentionally or not. The CDC put out such a message this May, before the effects of the Delta were being felt.

Now, it appears that the Delta variant itself has become a new rope in the tug-of-war between public health and truth. For the news of how much stronger this variant is than previous forms of COVID-19 has been exploited in several ways health care professionals worry will be counterproductive to the control of the pandemic. Some, like virologist Vincent R. Racaniello of Columbia University, are concerned the narrative of how much more dangerous the Delta variant Has become a cover for our own undisciplined behavior in not getting vaccinated, not masking up, and not maintaining social distancing. He counters this narrative by making a distinction between how fit a variant is and how transmissible it is. The fitness of a virus refers to how well it competes against other forms of the same virus in infecting humans and replicating itself. Clearly, Racaniello admits, Delta to date is the fittest variant by far.

Surprisingly to some, Racaniello goes on to deny that we yet have anything meaningful to say about how much more transmissible the Delta variant is than earlier version of the virus. In contrast to its fitness, the transmissibility of a virus is how likely it is to infect us, period. He correctly points out that fitness and transmissibility are independent variables such that the same virus may be more fit yet less transmissible, or vice-versa. There are many ways one variant of a virus may outcompete another, only one of them being that it is more transmissible.

The surprising aspect to Racaniello’s messaging, which reaches millions, is that he is playing the skepticism card regarding research on Delta’s superior transmissibility far more than do many of his fellow virologists – and he does not hide his purpose, which is to counteract what he considers to be the counterproductive effect the Delta variant narrative might have on public health. Perhaps he is right; perhaps we should leave science to the scientists and stay mum on science that is still “in progress”. Science happens, he reminds us, while pandemics run far more quickly.

My concern is that in playing this card, Dr. Racaniello may be creating a counterproductive narrative in the opposite direction. His denial that we have any knowledge that Delta is any more transmissible than any previous version of COVID-19 plays into the hands of many of us with COVID-fatigue who don’t want to think that, despite all our diligence to date, we may now because of Delta have to be upping our game just to stay safe. This despite the evidence coming in from other research in Racaniello’s profession, for which Racaniello not rarely claims to speak, that the Delta variant, though perhaps not more deadly all told, is in fact considerably more transmissible, gets us sick faster, and is more likely to infect the vaccinated, making them potential vectors of the disease to the unvaccinated, particularly children.

To be sure, children are less likely to die from COVID. Their immune systems seem to be more generically responsive than those of adults, such that their antibodies for other coronaviruses give some resistance to COVID-19. Only 1 out of 100 children infected with the disease are hospitalized, and only 1 out of 10,000 of those infected die. Delta has done nothing to increase these numbers, and there is no evidence that Delta on the whole is more deadly than previous variants. Nonetheless, children can and do get infected and Delta makes infection more likely, even by means of the vaccinated.

The evidence is growing that Delta is more transmissible because it replicates in cells much faster (Sarah Reardon, “How the Delta variant achieves its ultrafast spread”, in Nature, <https://www.nature.com/articles/d41586-021-01986-w>, July 21, 2021), is more likely to infect us initially because of adaptations to its spikes that makes it more evasive to our antibodies ( Delphine Planas, et al., “Reduced sensitivity of SARS-CoV-2 Variant Delta to antibody neutralization”, in Nature <https://www.nature.com/articles/s41586-021-03777-9>, July 10, 2021), and is more effective at gaining the needed collaboration of furin, the protein-cutting enzyme sent out from host cells as an initial line of defense, whose services viruses like COVID-19 coopt to gain entry into cells (Ewen Calloway, “The mutation that helps Delta spread like wildfire”, in Nature, <https://www.nature.com/articles/d41586-021-02275-2>, August 20, 2021).

These are all things Dr. Racaniello knows and could not deny, but which he judges not to be things worth his speaking about in public on the grounds that they are premature, and that we might become distracted by these things from focusing on human behavior. In his defense, it is true that it will take a long time to finalize the research on how transmissible the Delta variant really is; we will have to go over thousands and thousands of well-documented cases of transmission, something we have not yet had time to do.

But what we already know by direct observation of the Delta variant should also count as a kind of verification as well. For there are two ways to know how fast something goes. The first way is to observe it being driven around a track. The second way is by direct examination of the thing as a mechanism. A good mechanic should be able to say how fast a car can go without ever driving it just by doing a thorough examination. This is what virologists have been doing with the Delta virus for months now, and they are uncovering adaptative mechanisms that make Delta more infective and spread faster, such as the ones cited above.

Health care researchers have to toe the line between truth and public health, so it is not alarming to see some lean more toward one than another, according to circumstances. But we must remain flexible enough not to become beholden to messaging that no longer serves its purpose. The downplaying of incoming observations on the greater transmissibility of the Delta virus made more sense earlier this summer than it does right now. We are at a crossroads where continued reluctance to update our messaging is counterproductive. The fact is that because of Delta, we need to up our game. Not only do we need to continue sternly to urge vaccination and masking, but we need to urge even the vaccinated to maintain distancing and avoid prolonged and concentrated social gatherings until our children have been vaccinated.