

## **STICKY WICKET**

## Corona XXXIII – Elementary

Mole



Original artwork by Pete Jeffs - www.peterjeffsart.com

Sometimes, not very often, but sometimes, I just don't *get* it. Let's say you are crawling through a desert (a warming thought on this cold, blustery day), dying of thirst, and somehow, there in front of you, is a bottle of fresh, clean water. But it isn't your favorite brand, or you don't have the right drink mix, or whatever, so you crawl on. I can *get* that – okay, not really, but if this is the ad for Aquafantastic, or Flavorful Fruit Drops, it sort of makes a twisted kind of sense. Stupid sense, of course, but there's a sort of consistent logic. (This said, I don't endorse turning down life-saving water under such circumstances, nor I do not consult for either company. Yet. I think I could be a great spokes-insectivore, though). Now I'm thirsty. I'll be back. Ahh, much better, especially with some of that *amazing* FFD in my favorite, cool Aquafantastic. (I'm just saying, I'm available).

But this week, while I was the only *in person* faculty member at our faculty meeting (masked, of course, but I thought maybe I would see an actual person, but that wasn't to be), we had an update on our vaccination efforts, which are apparently going very well. And at the end, as it was wrapping up, the presenter mentioned that we had a seventy percent acceptance rate. If I had been drinking coffee (or Aquafantastic, but it wouldn't have been as funny) I would have done a 'spit-take.' That's when you spit out your coffee, etc. to great comic effect. (The immortal master of the spit-take was Danny Thomas, a beloved comic, whose early TV show was 'Make Room for Daddy.' He did a *lot* of spit-takes, I think at least one per show. It might have been in his contract. I do not have any authoritative

information on this, but I don't think anyone managed to rival his spit-takes, at least until Stephen Colbert came along. He does them very well. Where was I? Oh, right, seventy percent.) So, I spat out my virtual coffee, and said, 'huh?'. I was politely informed that an acceptance rate of this order was actually pretty good, since the national average was at least ten percent lower, given our very high level of *vaccine hesitancy* in my country. I spat out more virtual coffee and said, 'huh?'. But by then the meeting was over, so I was left *just not getting it*.

Okay, of course I've heard of vaccine hesitancy, and of the more severe version, the anti-vaccine, or anti-vaxxer, movement. But I had thought (foolishly, it turns out) that surely these folks were pretty rare, and that anyone who had a chance to free themselves from the very real fear of dying or becoming disabled during this Terrible Pandemic (TP) would leap at the chance. Clearly, I'm wrong, and I just don't *get* it.

Yesterday, I contacted my colleague, Dr. John Hamish Watson, MBBS, to seek some insight into this conundrum. He assured me that not only was it very real, this vaccine hesitancy/refusal, but very widespread. In my country, which now has an actual president (and not just one who plays one on TV), fifty-one percent of respondents to a recent survey said that they would refuse or at least delay receiving a vaccination for the TP. Thirteen percent said that they would refuse it under any circumstances (and another seven percent said they would only take it if required). He also told me that the World Health Organization lists vaccine refusal among their top ten

greatest threats to world health. But of course, I still didn't *get* it. It's such a mystery, I insisted. So, JHW very kindly put me in touch with his long-time friend, colleague, and collaborator in Sussex. The venerable Mr. Sherlock Holmes, consulting detective (retired).

Maybe you've heard of him. His very first case, most likely, was recorded as 'The Gloria Scott', which he solved while still in school, four years before his case of 'The Musgrave Ritual.' He did not meet JHW until 'A Study in Scarlet,' three years after the latter. Over his illustrious career, and even in his retirement, he famously continued to solve mysteries, until the last recorded case, which was 'The Adventure of the Lion's Mane,' unless you count 'His Last Bow,' (which I don't – it really wasn't a mystery). Oh, and the killer in the Lion's Mane was a cnidarian (*Cyanea capillata*), which may be of interest those of us who are biologists. Now, Mr. Holmes keeps bees, and has written a rather good book about it.

He's even older than I am, but still sharp as the proverbial tack. (Tacks are small nails, and pretty sharp, but I'm not sure why they are considered smart. Maybe it's another thing I don't get, but Holmes is *very* smart). Upon greeting me at the door of his simple home, he was quick to make several of his famous deductions, to wit: "Ah, Mole. I observe that although you consider yourself an insectivore of the family Talpidae, you are fond of red meat and Scottish whisky, you do not smoke a pipe but indulge in cigars, own one, no two, cats, and spend a large part of your time reviewing papers and grants of a biomedical research nature. Please come in." Of course, I was confounded, and my mind raced. Had he quickly identified different cat hairs about my person, noted a nicotine stain on the second finger of my left hand, and caught a spot of hamburger juice on my lapel? Before I could ask, he clarified, "Elementary, of course. Watson told me all about you, and I've had a glance at some of your columns. You really should have a Wiki page. I have several, you know." (I did know, but there are much better sources of information, including the three volume, 'Annotated Sherlock Holmes' and the diligent detective work of the work of the Bakerstreet fandom group).

We made ourselves comfortable in his drawing room, and Holmes filled his pipe with black shag from his Persian slipper pouch on the mantelpiece. "The case is not without interest, although hardly a 'three pipe' problem. You have questions on the sources and causes of vaccine hesitancy and anti-vaccine zealotry. Let's take the simplest first." He sat across from me and fixed me with his gaze.

"The distrust of vaccines and vaccination is as old as the process itself," he began. "I'm sure you know that the name itself comes from *vacca*, cow, reflecting the administration of cowpox (*vaccinia*) to provide immunity to small pox at the end of the 18th century. But until the 20th century, distrust of the medical profession was rampant due to the perception of its poor record of providing benefit. To save one's life, you had only to keep the doctors, with their purges and bloodletting away, or at least that was the perception. By the early 1900s, however, the profession was receiving outstanding public relations, and even Hollywood was producing movies that expounded the wonders of medical treatment. Thanks to the outstanding efforts of Florey and Chain during WWII, the use of antibiotics was so effective that the profession gained the reputation for being miracle workers. Vaccination was widespread, diseases were treated and often eradicated, and doctors were *trusted*.

"But against that backdrop, there were swaths of the population who did not see such benefits, and indeed, had very good reason for distrust. The notorious Tuskegee 'experiment' (Holmes here made a disgusted face) was only a small part of it." Hopefully, the history of the disgraceful Tuskegee story is familiar to you – if not, it is essential that all of us in biomedical research learn the lessons of this outrage (look it up).

Holmes continued, "There is so much more. In your country, and mine, many tens of thousands of women were sterilized against their will in a ridiculous effort to 'improve human kind.' Even by the end of that century, there were proponents of such 'eugenics,' including at least two Nobel laureates, one of whom invented the transistor (thus making him somehow qualified to espouse such nonsense) and another who reported the structure of DNA (and should certainly have known better). And all of this was clearly fueled by bigotry and racism in the guise of 'medical science." He made quote marks in the air, a strikingly modern affectation for a Victorian. "It is no wonder at all that there is some hesitancy among minority groups to accept a vaccine upon assurance from the medical community.

"But we can deduce that the source of such hesitancy is not only such misconduct. We know that many people who are not considered to be minorities remain hesitant, and here the cause can be a little more subtle. Despite the remarkable progress in medical science in the last century, we have seen little improvement in the outcomes of viral diseases, bacterial sepsis and cancer over the past several decades (hopefully this is starting to change, but that is not the point). While the public no longer fears diphtheria, polio, tetanus, or pertussis, we have MRSA and now COVID, and are told repeatedly (and correctly) that there are many other diseases threatening to break into pandemics. Survival rates from the major cancers have not improved significantly in the past twenty years (again, I agree that this is changing). Lethal allergies, autism, and other conditions appear to be on the rise. There are those in the public, even in the *educated* public, who are feeling that the benefits of medical science are not improving their lives. Hence, showing a bit of hesitancy about vaccines, especially vaccines that appear to have been developed at 'warp speed,' is not ridiculous. I see that you disagree, but calm yourself, I am with you, Old Chap. It is up to you, and all of your expert colleagues, to continue to patiently inform this public of the actual facts on safety and efficiency."

Holmes sat back in his chair and puffed his pipe. I noted that it was not a calabash, which was never his pipe of choice, and that pipe is not mentioned in any of the stories of his adventures. It has, however, frequently appeared in depictions of Holmes in movies and television, and its origins are attributed to the American actor, William Gillette, whose play, 'Sherlock Holmes' premiered on Broadway in November, 1899 at the Garrick Theater. Gillette apparently felt that he needed a prop to make Holmes appear eccentric. "You are distracted, Mole, but I understand that this is not unusual." He continued, "All of this is, of course, elementary. The thornier problem is that of anti-vaccine sentiment. But the hour grows late, I am tired, and the bees need to be tended to. Call on me tomorrow, and we'll tackle your concerns and put your mind to some rest." He abruptly stood, and showing no signs of his professed exhaustion, hustled out of the room, leaving me to make my own departure. I returned to my room (there was no local Inn, but Air B&B provided), had a meal and a quantity of 'tea,' and reviewed my remarkable visit until I felt sleep overtaking me.

Well, that didn't happen, that sleep overtaking me thing. Jetlag, I guess. Oh, well. Where did I put that Agatha Christie novel? Ah, here it is. See you, anon.