

COVID-19 also known as SARS-CoV-2, is a zoonotic virus, a virus that “jumped” from an animal carrier to humans. There is ample evidence to suggest COVID-19 originated in bats bred for human consumption, which in turn infected pangolins which were also being raised as for consumption, and then was transferred to humans at a wet market in Wuhan, China (Ellis 2020, Shaheen 2020). Wet markets are open-air food markets where living animals are caged, slaughtered, and sold for food. Many of these animals are not domesticated, such as civets, bats, snakes, and pangolins. These animals are either caught in the wild or have been bred in captivity for food (Branigan 2013, Ellis 2020, Shaheen 2020). The conditions in these markets are off-putting to many westerners: treatment of the animals is inhumane by western standards and the conditions are unhygienic (Ellis 2020, Shaheen 2020) though it must be noted our attitudes about Chinese foodways and attitudes toward food animals may be rooted in cultural bias and racism. American industrial farming of animals for meat is not tidy nor particularly humane, but the dirty work is not conducted in plain view. We need to approach the issue with a level of cultural sensitivity (Burton 2020).

To better understand the spread of COVID-19, as well as other recent zoonotic diseases that have originated in China, I feel it’s necessary to have some background on the events that led to the development of wet markets in the first place. The *large scale* hunting, breeding, and selling of exotic animals as food is a relatively recent development that can be traced directly to the Great Famine of 1959-1961. This famine came on the heels of the Cultural Revolution. Between **15 million and 50 million** people starved to death during this three year period (Branigan 2013, Ellis 2020). People were growing food crops as they starved to death, resources were not distributed equally among the people due in part to poor government planning and lack of appropriate food distribution systems (Branigan 2013, Ellis 2020). As there were restrictions on farming for personal consumption, people were forced to eat dirt, grass, and bark to stay alive. Some people resorted to cannibalism (Branigan 2013). Hunting wild

animals, like bats and civets, snakes and pangolins, became a means to survive. The Chinese government realized there was revenue to be gained in the hunting, breeding, selling and consumption of non-domesticated animals and the government actively encouraged these practices and enacted laws protecting farmers' rights to keep and breed these animals for consumption as "development for utilization of wildlife resources" (Branigan 2013, Ellis 2020, Shaheen 2020).

Westerners decry the inhumane and "filthy" markets that created a perfect environment for zoonotic diseases to spread (Ellis 2020, Shaheen 2020) and yet we have little understanding of the underlying systems and events that lead to the problem in the first place. We need to be aware of this scenario as we look at profound poverty in other countries where people feel compelled to hunt, eat, and sell "bushmeat" in order to feed themselves and their families. Americans seem to care much more about the plight of the pangolin (I love those little guys, they are adorable) than they do about the pangolin farmer who's trying to feed his family, or the cultural and generational trauma of the mass starvation of at least 15 million people in three years.

We are repeatedly blindsided by disaster and crisis though there is a well-documented history of disease and disaster from the beginning of recorded time. Every new plague that infects us, every hurricane that blows a trailer park to pieces, every time a levee is breached and thousands of people are forced from their homes or die, we scramble and flail, gobsmacked and disoriented as though these things are unforeseeable or unpredictable. An essay from April 2nd, 2020 in the *New England Journal of Medicine*, History in a Crisis, Lessons for Covid-19 by David Jones, MD. PhD., recounts the work of historian Charles Rosenberg, who has studied epidemics through history and has come up with a "archetypal structure" of epidemics. I'm using epidemic here rather than pandemic, as that is the term used in the essay. It's uncanny how we can see these stages or "acts" as Rosenberg called them, play out. Act 1: People ignore the signs that disease is coming, people over there are sick. We are safe. Act 2: People we

recognize as being like us get sick and start to die and we reluctantly admit something is wrong and we find someone to blame. We can see this in the targeting of Asian Americans during the COVID-19 outbreak here in the U.S. and Trump's repeated use of the term "Chinese virus". A group that come to mind who have been scapegoated in the past are gay men during the HIV-AIDS epidemic. Act 3, Resolution occurs when there is a "crisis of individual vs collective character"; all of the susceptible people die or there is a collective effort to stop the disease. We can see this dynamic playing out among certain of our citizens, those who are committed to social distancing, self isolation, wearing face masks, people sewing masks for medical personnel, vs, those who disregard the health of others so they can go to Florida on spring break or among Evangelical Christians who insist on attending church during a pandemic. It is interesting to note the recurring theme that comes up here, individual vs collective. We in the U.S. are so committed to our sense of personal liberty we're willing to let our elderly die so we don't lose our 401K. Juxtapose that with the sense of collective responsibility seen in New Zealand, where Prime Minister Jacinda Ardern's reaction to the pandemic was based on consideration of the opinions and expertise of scientists and doctors, and where action was taken before the country was plunged into a humanitarian disaster. There has been very little push-back against strict restrictions and mandates to shelter in place with the recognition personal liberties might be temporarily reduced for a greater cause (Fifield 2020).

This pandemic is shining a bright and unforgiving light on the inequities and shortcomings of our society, institutions, and policies. Those who suffer most during periods of wide-spread disease are the people who are least valued by society (Jones 2020). People of color and the poor are getting sick and dying in disproportionately higher numbers compared to white middle class people. That's not an accident: the flaws in our institutions that create social injustice and harm oppressed people are showing. There is also a long standing reluctance to plan institutionally for disaster, and medical care providers are often hard hit during outbreaks of disease due to an almost predictable lack of forethought and planning (Jones 2020). We need

to implement institutional policies to ensure adequate PPE supplies are available. Pandemic has never been a “what if ” scenario; similar events have happened throughout history, this pandemic was inevitable and it will happen again.

It’s interesting that COVID-19 should hit us now when people in the United States have become fearful of vaccines and have become less inclined to believe science, preferring to place their faith in “natural” remedies and alternative medicines. Ironically, some of these alternative medical practices originated in China, and some of these remedies and natural tonics are made from the very animals that are raised in wet markets such as the one in Wuhan (Maron 2018) but that’s a story for another day.

References

- Branigan, T. (2013, January 1) China's Great Famine: The true story. *The Guardian*
<https://www.theguardian.com/world/2013/jan/01/china-great-famine-book-tombstone>
<https://www.nejm.org/doi/full/10.1056/NEJMp2004361>
- Burton, X., (2020, February 7). The corona virus exposes the history of racism and
"cleanliness". [Video]. Vox. www.vox.com › coronavirus-xenophobia-racism-china-asians
- Ellis, S. (2020, March 6). Why new diseases keep appearing in China. [Video]. Vox.
<https://www.vox.com/videos/2020/3/6/21168006/coronavirus-covid19-china-pandemic>
- Fifield, A. (April 7, 2020) New Zealand isn't just flattening the curve, it's squashing it.
Washington Post, [Washingtonpost.com/world/asia_pacific/new-zealand-isnt-just-flattening-the-curve-its-squashing-it/2020/04/07/6cab3a4a-7822-11ea-a311-adeb1344719a9_story.html](https://www.washingtonpost.com/world/asia_pacific/new-zealand-isnt-just-flattening-the-curve-its-squashing-it/2020/04/07/6cab3a4a-7822-11ea-a311-adeb1344719a9_story.html)<https://www.nejm.org/doi/full/10.1056/NEJMp2004361>
- Jones, D.S., (2020) History in a crisis: Lessons for COVID-19, *The New England Journal of Medicine*, <https://www.nejm.org/doi/full/10.1056/NEJMp2004361>
- Maron, D. F., (December 20, 2018) Will mainstreaming traditional Chinese medicine threaten wildlife? *National Geographic*
<https://www.nationalgeographic.com/animals/2018/12/traditional-medicine-decision-threatens-wildlife/>
- Shaheen, T., (2020, March 19). The Chinese wild-animal industry and wet markets must go.
The National Review <https://www.nationalreview.com/2020/03/the-chinese-wild-animal-industry-and-wet-markets-must-go/>

