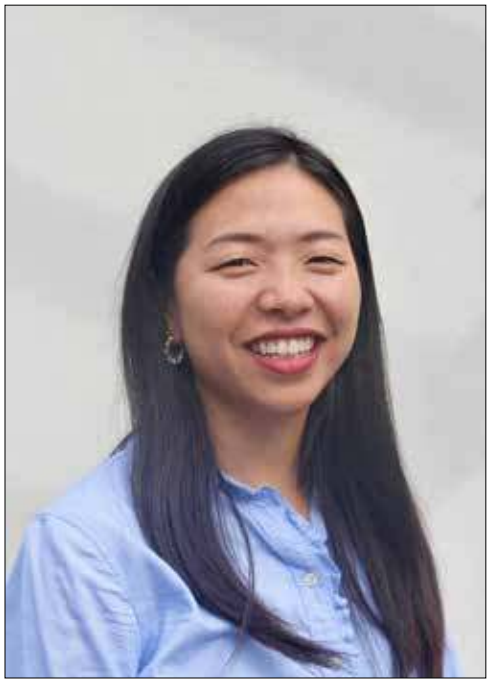
Yellow plague in America:

The intersection of disease, social determinants, and discrimination



Rebecca Chen

Ms. Chen is a fourth-year medical student at Baylor College of Medicine, Houston, TX. She is the recipient of the first place award in the Alpha Omega Alpha Honor Medical Society 2022 Helen H. Glaser Student Essay Award.

People say that we study history to learn from the mistakes of our past. However, history has an insidious way of repeating itself so quickly that we seem unable, or unwilling, to correct ourselves the next time around. When people's health, safety, and trust are at stake, the need to reconcile with our mistakes and truly change on a systemic level only grows more paramount. In multiple instances, important health efforts have failed because officials let the public imagination run wild to the very basest of our sensibilities.

At the turn of the 20th century, the bubonic or yellow plague swept through the United States, notably taking root in San Francisco and claiming more than 100 lives over the course of three years. Little was known about pathogenesis or inoculation against this disease, despite the first vaccine against the bubonic plague having been developed in 1897.[1] The public persisted with holding beliefs about diseases germinating from bad air, filthy conditions, and untoward individuals. The latter category was pinned to Chinese immigrants inhabiting San Francisco's Chinatown.

The first case of bubonic plague struck in March 1900 and killed a man residing in Chinatown. Cases continued to pile up, each patient examined by a local doctor who often took samples and isolated the bacterium responsible for bubonic plague—*yersinia pestis*.[2] Yet, public officials adamantly denied any such illness' existence in the city. Dr. George F. Shrady, Jr., was called in from New York to examine the veracity of the accounts of the plague, and his report from May 30, 1900 disputed the existence of "a single case of any illness, much less a case of bubonic plague."[2]

The very next day, Shrady refuted his earlier remarks. He examined a corpse that revealed "manifest evidences of the plague," but cautioned the public not to be alarmed.[3] He claimed he could easily dispel the risk of disease spreading beyond Chinatown. With quarantine in place, and plans to clean Chinatown, the spread should be thwarted, Shady claimed, since "transmission of epidemics of this disease is mostly due to soiled clothing and dirty

and infected houses."[3] He went on to note, the plague "has a greater predilection for the Asiatic race and exceptionally attacks the Whites."[3]

Shrady's assertions about particular people and places having a predilection for disease fueled biases to take root against Chinese Americans. *The San Francisco Call* churned out pieces that denigrated Chinatown's conditions and blamed Asian individuals for bringing disease to the city. Alongside the articles, opinion pieces declared that, "Chinatown is a natural plague spot…the only sure method is to apply the torch" and burn it all.[3] This inflammatory rhetoric hardened public sentiment against the Chinese immigrants living in fear of contagion. It was on them, with their squalid houses and unclean habits, to stop the bubonic plague from spreading.

As death rates from the plague continued to rise, public health officials denied the existence of the bubonic plague and instead focused on the moral failings of Chinatown's citizens.[1] They kept a quarantine in place for Chinatown, and at one point set a statute to restrict the movements of all people of Asian descent throughout the city.[4] Their persistent denial of any potential health problems beyond the confines of Chinatown let the public focus on one group as the scapegoat while health officials failed to take any precautionary measures to protect that group against further harm.

"The universal verdict is that Chinatown must be cleaned up, plague or no plague," declared Shrady on June 1, 1900, months after the first death from bubonic plague in San Francisco. "Chinatown is so notoriously filthy that almost any superlative could fit such a condition…if the plague should get a firm foothold, it will find its natural soil for the most widespread and awful dissemination."[5]

The next day, the front-page story of *The San Francisco Call* was entitled "San Francisco Free from Deadly Plague."[6] Shrady had found no cause for concern in the whole city, though he mandated a quarantine still to be in place for denizens of Chinatown. "The Chinese are accepting their imprisonment gracefully,"[6] the paper proclaimed. No voice was given to the citizens of Chinatown who were sentenced to continual quarantine. The article continued to detail the "clamor…raised by them for food," which local authorities have "no indication" to address.[6]

Without any resources to earn wages or buy food, this community was abandoned by the larger city and marked out as dangerous. Public sentiment had risen strongly against the Chinese community as seen in newspaper headlines, cartoons and political propaganda. In November 1901, *The San Francisco Call* headline read, "Chinatown is a Menace to Health," followed by articles lauding the success of the Chinese Exclusion Act, passed 19 years prior, and bemoaning the unsanitary conditions in Chinatown.[7] Among the talk of open sewers and "poorly ventilated and overcrowded apartments" though, no reporter stopped to consider the reason for these conditions.[7] Newspapers blamed poor living conditions on the denizens of those communities rather than on the landlords and laws that underlay the conditions. Chinese immigrants faced housing restrictions in most parts of San Francisco except for Chinatown, where landlords didn't update plumbing or listen to tenant's requests, since they would always have a captive clientele for their rentals.[1,8]

At the same time that Chinatown and Chinese individuals were blamed for the spread of bubonic plague, public health officials acknowledged that flea-bitten rats likely spread the pathogen from person to person.[9,10] Yet, these reports were less printed and read than the sentiment that Chinese immigrants caused the plague. This was until the wider San Francisco community became afflicted with cases of bubonic plague.

The great San Francisco earthquake and fire of 1906 caused rampant destruction that resulted in accumulation of trash around the city, and an overproduction of fleas.[8] By the spring of 1907, cases of plague began to crop up all around San Francisco. Out of 167 cases reported over the course of one year, only eight victims were Chinese. Public health officials did not try to deny the existence of the plague and instead took proactive measures to rat-proof buildings and stop the spread of the pathogen.[8]

One hundred fifteen-plus years later society appeared to advance in important and memorable ways. Movements for labor unions, civil rights, suffrage, pride, disability accommodations, and Black lives all changed the way that the U.S. treats certain individuals. But, laws being in place did not mean that all attitudes have changed. In the spring of 2020, a global pandemic ravaged the world. This pandemic had its origins traced to wet markets in Wuhan, China and the same us-versus-them sentiments arose.

On March 16, 2020, then-president Donald J. Trump referred to COVID-19 as the "Chinese virus" in a tweet.[11] Politicians and public officials defended his word choice, decrying any claims of racism and stating that the term was simply factual. Yet, Twitter saw a precipitous rise in anti-Chinese sentiments after the President's tweet, many accompanied by the hashtag "Chinese virus."[11] Linked to this rise was a concomitant increase in the number of anti-Asian hate crimes, with more than 600 reported between March 19 and 25.[11,12]

Anti-Asian sentiments continued to spew from the highest office in the country. President Trump claimed in July 2020 that, "it's a disease, without question, [that] has more names than any disease in history. I can name kung flu, I can name 19 different versions of names."[13]

By drawing on the shared memory of diseases linked, whether correctly or not, to Asian communities, President Trump invoked historical fears, and fanned the flames of bigotry. As lockdowns occurred throughout different parts of the U.S., people started blaming the restrictions on a specific country, and by extension, anybody who looked like they came from that part of the world.

One of the first mass killings in 2020 targeted Asian Americans working in Atlanta, Georgia. Eight people were killed, including six women of Asian descent. The man who committed the murders was described as having had a "bad day."[14]

Within a year of President Trump's "Chinese virus" tweet, hate crimes against Asian Americans grew to more than 6,600.[12] This rate is more than double the number in the previous year.[15] The incidents reported included verbal harassment, shunning, and physical assault, the latter of which made headlines on several occasions especially as septuagenarians faced brutal attacks.[16] One illustrative incident involved Vicha Ratanapakdee, who was taking his usual morning walk in San Francisco when he got shoved to the ground by an assailant and lost consciousness. Ratanapakdee never woke up and died.[17,18]

The Asian American community suffered. The elders, the *nai nais* and the *ye yes,* suffered. The rising racism against Asian Americans only exacerbated existing health disparities. Asian Americans, often clumped together as one group, or shuffled under the broad racial categorization of "other" in statistical analyses, have lived experiences and socioeconomic situations that represent all facets of the spectrum.[19] Disaggregating demographic data would allow public health officials to see the true need in different communities and formulate proactive plans to protect community well-being.

The Asian American experience of COVID-19, is multifaceted, but has been shown to involve a disproportionately high mortality rate. In San Francisco, half of the city's fatalities from COVID-19 occurred in the Asian American community, even though that community accounted for only 13.7 percent of total cases.[20] Studies focused on whole states and then meta-analyses of this data found this trend to hold true across America—Asian Americans had one of the highest case fatalities from COVID-19 among all racial groups.[20]

Different reasons for this high fatality rate have been postulated, yet a wider audience has yet to reconcile with this disparity. The reasons may include cultural practices like intergenerational housing, but more importantly from a public health perspective, lower test rates despite high probability of contracting COVID-19 and presenting to hospitals at later stages of disease than non-Hispanic Whites.[19,20] The latter two reasons can be traced back to a lack of resources provided to Asian Americans, and their fear of venturing out, in case they would be met with threats or violence.[19,20]

People blame what they cannot understand. And for centuries now, the blame has rested with those considered foreign, those seen as untrustworthy, those who might be asked, "Where are you from?" Our response cannot be to tolerate these actions or look the other way. This rhythm ties into deeper biases about cultural ideas around health, cleanliness, respectability, and race.

We must challenge our preconceived notions about people. We must be proactive in offering support to individuals affected,[21] and in championing the right to resources for all communities, especially those of color.[19,20] The time for change can, and should, be taken seriously.

References

1. Barber MB. Plague Appears in San Francisco. Cal@170 by the California State Library. March 11, 2020. https://cal170.library.ca.gov/plague-appears-in-san-francisco/.
2. Humanities NE for the. The San Francisco Call. Vol. 87, No. 191. (San Francisco [Calif.]) 1895-1913, May 30, 1900, Image 1. https://chroniclingamerica.loc.gov/lccn/sn85066387/1900-05-30/ed-1/seq-1/. Published May 30, 1900.
3. Humanities NE for the. The San Francisco Call. [volume] (San Francisco [Calif.]) 1895-1913, May 31, 1900, Image 1.https://chroniclingamerica.loc.gov/lccn/sn85066387/1900-05-31/ed-1/seq-1/. Published May 31, 1900.
4. Humanities NE for the. The San Francisco Call. [volume] (San Francisco [Calif.]) 1895-1913, May 29, 1900, Image 2.https://chroniclingamerica.loc.gov/lccn/sn85066387/1900-05-29/ed-1/seq-2/. Published May 29, 1900.
5. Humanities NE for the. The San Francisco Call. [volume] (San Francisco [Calif.]) 1895-1913, June 01, 1900, Image 2.https://chroniclingamerica.loc.gov/lccn/sn85066387/1900-06-01/ed-1/seq-2/. Published June 1, 1900.
6. Humanities NE for the. The San Francisco Call. [volume] (San Francisco [Calif.]) 1895-1913, June 02, 1900, Image 1.https://chroniclingamerica.loc.gov/lccn/sn85066387/1900-06-02/ed-1/seq-1/. Published June 2, 1900.
7. Humanities NE for the. The San Francisco Call. [volume] (San Francisco [Calif.]) 1895-1913, November 23, 1901, Image 3. November 23, 1901: 3.

8. Trauner JB. The Chinese as Medical Scapegoats in San Francisco, 1870-1905. California History. 1978;57(1):70-87. doi:10.2307/25157817
9. Humanities NE for the. The Indianapolis journal. [volume] (Indianapolis [Ind.]) 1867-1904, October 06, 1901, Part Two, Image 13.https://chroniclingamerica.loc.gov/lccn/sn82015679/1901-10-06/ed-1/seq-13/. Published October 6, 1901.
10. Humanities NE for the. The Kansas City sun. (Kansas City, Mo.) 1908-1924, January 02, 1915, Image 2. https://chroniclingamerica.loc.gov/lccn/sn90061556/1915-01-02/ed-1/seq-2/. Published January 2, 1915.
11. Hswen Y, Xu X, Hing A, Hawkins JB, Brownstein JS, Gee GC. Association of "#covid19" Versus "#chinesevirus" With Anti-Asian Sentiments on Twitter: March 9–23, 2020. Am J Public Health. 2021; 111(5): 956-64.
12. Jeung R, Horse AY, Popovic T, Lim R. Stop AAPI Hate National Report. Ethnic Studies Review. 2021; 44(2): 19-26.
13. Zhou L. Trump's use of "kung flu" is his latest effort to stoke xenophobia. Vox. June 23, 2020. https://www.vox.com/2020/6/23/21300332/trump-coronavirus-racism-asian-americans.
14. ABC News. Man charged with killing 8 people at Georgia massage parlors. February 16, 2022. https://abcnews.go.com/US/wireStory/georgia-massage-parlor-shootings-leave-dead-man-captured-76505943.
15. Center for the Study of Hate and Extremism. Report to the Nation; Anti-Asian Prejudice & Hate Crime - City Chart Data. June 1, 2021. https://www.csusb.edu/hate-and-extremism-center/data-reports/original-reports-hate-and-terrorism-center-staff
16. OCA National Center. OCA appalled at anti-asian discrimination cases across the country, calls for accountability and action. February 8, 2021. https://www.ocanational.org/press-releases/oca-appalled-at-anti-asian-discrimination-cases-across-the-country.
17. Lang C. Why More Policing Isn't the Answer to a Rise in Anti-Asian Hate Crimes. Time. February 18, 2021. https://time.com/5938482/asian-american-attacks/
18. CNN News. Vicha Ratanapakdee, 84, was fatally assaulted on a San Francisco street. His family says attack was driven by hate. February 16, 2021. https://www.cnn.com/2021/02/16/us/san-francisco-vicha-ratanapakdee-asian-american-attacks/index.html.
19. Wang D, Gee GC, Bahiru E, Yang EH, Hsu JJ. Asian-Americans and Pacific Islanders in COVID-19: Emerging Disparities Amid Discrimination. J Gen Intern Med. 2020; 35(12): 3685-8.
20. Yan BW, Hwang AL, Ng F, Chu JN, Tsoh JY, Nguyen TT. Death Toll of COVID-19 on Asian Americans: Disparities Revealed. J Gen Intern Med. 2021; 36(11): 3545-9.
21. Wang MZ, Hu JR. Asian American Trainees During the COVID-19 Pandemic. Acad Med. 2021; 96(6): 780.

The author's E-mail address is rlchen@bcm.edu.