# **UCLA**

# **UCLA Previously Published Works**

# **Title**

Asian-Americans and Pacific Islanders in COVID-19: Emerging Disparities Amid Discrimination.

# **Permalink**

https://escholarship.org/uc/item/1z14t7dr

## **Authors**

Wang, Daniel Gee, Gilbert C Bahiru, Ehete et al.

## **Publication Date**

2020-10-02

Peer reviewed

# Asian-Americans and Pacific Islanders in COVID-19: Emerging Disparities Amid Discrimination

Daniel Wang, MD<sup>1</sup>, Gilbert C. Gee, PhD<sup>2</sup>, Ehete Bahiru, MD<sup>3</sup>, Eric H. Yang, MD<sup>3</sup>, and Jeffrey J. Hsu, MD, PhD<sup>3</sup>

<sup>1</sup>Department of Medicine, David Geffen School of Medicine at UCLA, University of California, Los Angeles, CA, USA; <sup>2</sup>Department of Community Health Sciences, Fielding School of Public Health, University of California, Los Angeles, CA, USA; <sup>3</sup>Division of Cardiology, Department of Medicine, David Geffen School of Medicine at UCLA, University of California, Los Angeles, CA, USA.

Coronavirus disease 2019 (COVID-19) is a global pandemic. In the USA, the burden of mortality and morbidity has fallen on minority populations. The understanding of the impact of this pandemic has been limited in Asian-Americans and Pacific Islanders (AAPIs), though disaggregated data suggest disproportionately high mortality rates. AAPIs are at high risk for COVID-19 transmission, in part due to their over-representation in the essential workforce, but also due to cultural factors, such as intergenerational residency, and other social determinants of health, including poverty and lack of health insurance. Some AAPI subgroups also report a high comorbidity burden, which may increase their susceptibility to more severe COVID-19 infection. Furthermore, AAPIs have encountered rising xenophobia and racism across the country, and we fear such discrimination only serves to exacerbate these rapidly emerging disparities in this community. We recommend interventions including disaggregation of mortality and morbidity data, investment in community-based healthcare, advocacy against discrimination and the use of non-inflammatory language, and a continued emphasis on underlying comorbidities, to ensure the protection of vulnerable communities and the navigation of this current crisis.

J Gen Intern Med DOI: 10.1007/s11606-020-06264-5 © Society of General Internal Medicine 2020

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a global pandemic.<sup>1, 2</sup> In the USA, the burden of COVID-19 morbidity and mortality has disproportionately fallen on minority and immigrant populations, exacerbating existing societal biases and longstanding racial/ethnic disparities in health.<sup>3, 4</sup> Understanding these disparities in risk and outcome is of paramount importance. However, the understanding of the impact of this pandemic in Asian-Americans and Pacific Islanders (AAPIs) has been limited by inadequate data disaggregation, posing significant difficulties in the identification of vulnerable populations by ethnicity and

Received June 3, 2020 Accepted September 21, 2020

Published online: 02 October 2020

socioeconomic group, and the subsequent allocations of resources for prevention and treatment.<sup>5</sup>

### COVID-19 INFECTION AND MORTALITY IN ASIAN-AMERICANS

In aggregate, Asian-Americans represent 4.4% of deaths across the USA in the COVID-19 pandemic, below their population share of 5.7%. However, disaggregated data suggest far more complexity. In New York City, Asian-Americans account for 7.9% of deaths from COVID-19, while comprising 13.9% of the population. Similarly in California, Asian-Americans make up 13.2% of deaths compared with 14.5% of the population. Yet disproportionate mortality rates have been noted in in Nevada (15.4% of deaths versus 8.1% of the population), Utah (5.5% versus 2.4%), and Nebraska (5.9% versus 2.4%).

From the mixed picture above, it is clear that disparities vary by location; AAPIs are not uniformly spread across the USA. Further, AAPIs are not a homogeneous population, representing as many as 43 distinct ethnic groups, each with its own linguistic, cultural, and sociodemographic backgrounds and immigration histories. <sup>9, 10</sup> Therefore, disparities at the subgroup level may be obscured by the blanket classification of "AAPI" and further hidden by poor reporting: Asian-American deaths are unknown in states such as Florida, Mississippi, Missouri, and South Carolina, where Asians are classified as "Other" in publicly available statistics. <sup>6, 11</sup>

#### **COVID-19 AND PACIFIC ISLANDERS**

A further complication relates to aggregation of Pacific Islanders along with Asians. In 1997, the U.S. Office of Management and Budget began recognizing Pacific Islanders (PIs) as a population separate from Asian-Americans, due to advocacy efforts from the PI community and the recognition of sociodemographic differences between Asian-Americans and PIs. 12 Yet during this pandemic, disaggregated data on PIs remain particularly scarce. Within New York City, PIs were grouped under the "Other" category until late April in the

mortality reports stratified by race/ethnicity, and subsequently under the aggregate of "AAPI."

Yet clear disparities are evident in the few instances where PI-specific data are found. Within California, PIs are dying at a rate that is fourfold their population share and the most disproportionate of any population within the state. Similarly, within Los Angeles County, PIs represent only 0.4% of county residents yet account for 1% of COVID-19 deaths, a 2.5-fold discrepancy and the largest of any group. Other estimates suggest that the PI case rate is 217.7 per 100,000 in California, more than 3-fold higher than the 62.43 per 100,000 for the state population as a whole. Disproportionate rates were also observed in Colorado, where PIs represent 0.1% of the population but account for 0.6% of cases and 1.6% of deaths. These disparities have spurred calls to increase access for PI testing and reporting of PI-specific data.

## ESSENTIAL WORKERS, INTERGENERATIONAL CO-RESIDENCE, POVERTY, AND LANGUAGE

Risks for AAPIs exist due to occupational exposures: according to the Asian Pacific American Labor Alliance, more than two million AAPIs work in healthcare, transportation, and service industries. Minority communities are known to be more exposed to the virus, due to their over-representation in the low-wage, essential workforce at the front lines. They too face challenges once away from work, such as inability to socially distance due to housing density and over-crowding. A, 5, 19

Among these frontline workers, Filipino-Americans are at increased risk due to their outsized proportion in the nation's nursing force. Filipino-American nurses have a lengthy history in the USA, and though they account for 4% of the total nursing workforce, they comprise up to 20% of registered nurses in states such as California.<sup>20</sup> They are more likely to work in acute care, medical/surgical, and intensive care units, thus serving on the front lines of care for patients with COVID-19.<sup>20</sup>

Cultural practices among AAPIs may also place them at risk for COVID-19 transmission, such as a prevalence of intergenerational co-residence. Chinese-Americans, Japanese-Americans, and Filipino-Americans, for instance, are more likely than their white counterparts to live in three-generational households. <sup>20, 21</sup> Similarly close-knit familial social structures are found in PIs. <sup>15</sup> An AARP survey also found 43% of AAPIs providing support to elderly family members, compared with 19% of white Americans. <sup>9</sup> Though the reasons behind this are diverse, encompassing filial obligation, financial resources, family composition, and immigration history, these high rates of intergenerational contact indicate a risk that requires culturally competent care. <sup>15, 21</sup>

Further, other socioeconomic determinants of health can present barriers to healthcare for many AAPIs, even outside of the COVID-19 pandemic. <sup>19</sup> A paucity of data exists on the subject,

with Asian-Americans remaining one of the most under-studied groups in terms of health status and service use. <sup>22</sup> In regard to financial status, Asian-Americans are over-represented on both ends of the economic scale, though those whose family incomes are below the federal poverty level are poorer than any other group. <sup>23</sup> Strong subgroup variation exists, with Japanese and Filipino-Americans having lower poverty rates than white Americans, while Hmong, Khmer, Laotian, and Vietnamese-Americans have higher poverty rates. <sup>23, 24</sup> For instance, one study found that 93.7% of Hmong-Americans and 57.1% of Vietnamese-Americans live under the poverty level. <sup>23</sup> Low so-cioeconomic status alone has been found to be an independent risk factor for total mortality. <sup>25</sup>

Vietnamese, Korean, and Chinese-Americans, as well as PIs, are also more likely to be uninsured than white Americans. <sup>22, 26, 27</sup> Yet for those who do access healthcare, a national survey by the Commonwealth Fund found that Asian-Americans were less likely than white Americans to be satisfied with the care received, or state that their doctors understood their backgrounds and values, involved them in decisions, or discussed lifestyle issues such as exercise and smoking. <sup>22, 28</sup>

Another major issue relates to language. Approximately 1-in-3 AAPIs have limited English proficiency (LEP), although this varies tremendously by subgroup. <sup>29</sup> For example, 78% of Bhutanese-Americans have LEP. Poor English proficiency is a risk factor for illness, serves as a social determinant because it affects employment, amplifies health problems related to racial discrimination, and restricts access to services. <sup>30, 31</sup> For instance, 57% of Cambodian-American women report difficulty accessing care due to a scarcity of interpreters. <sup>26</sup> Not surprisingly, a recent survey found that 9 of 10 of AAPI-serving community organizations cited the dire need for COVID-19 resources in AAPI languages. <sup>32</sup> Websites such as *translatecovid19.org* have surfaced to meet this need, but such efforts require greater support and development.

## **CARDIOVASCULAR RISK FACTORS**

Even before the outbreak of COVID-19, evidence suggested that acute coronary events and strokes could be triggered by common infections, such as influenza.<sup>33</sup> Epidemiological evidence for COVID-19 has shown infection to be particularly severe in hospitalized patients with underlying cardiovascular disease.<sup>33, 34</sup> Further, older adults with conditions such as hypertension, diabetes, obesity, chronic lung disease, and cardiovascular disease are more vulnerable to COVID-19.<sup>35–37</sup> In particular, a history of coronary artery disease was more common in those with severe (5.8%) than non-severe disease (1.8%).<sup>37</sup> Thus, there appears to be a predisposition to a more severe course with COVID-19 infection among those with cardiovascular comorbidities.

This epidemiological data on COVID-19 is particularly relevant to AAPIs. Around 20% of native Hawaiians and PIs have heart disease, and 6.9% have coronary artery disease.<sup>38</sup>

South Asians have also been identified as being high risk for cardiovascular disease.<sup>39</sup> Older Chinese and Koreans have poorer health statuses than national norms.<sup>10</sup> One study found that Filipino-Americans have the highest prevalence of hypertension among Asian-Americans and the highest comorbidity rate, at risk for coronary artery disease, diabetes, and other metabolic issues.<sup>10</sup> Asians were also less likely than other groups to have received care for their chronic conditions.<sup>28, 40</sup> The socioeconomic disadvantages discussed in the previous section have been linked to these findings of poor health.<sup>10</sup>

# OTHER IMPACTS OF COVID-19—DISCRIMINATION AND XENOPHOBIA

AAPIs have had a long history of being scapegoated and marginalized during public health crises in US history. From the 1900 quarantine of San Francisco's Chinatown due to a purported fear of the bubonic plague, to the 2003 severe acute respiratory syndrome (SARS) pandemic that was associated with Chinese-Americans, racism and xenophobia were not only expressed but also institutionalized into law. In 1882, the Chinese Exclusion Act was passed, the first immigration law to bar an entire ethnicity from immigrating to the USA, and one not repealed until six decades later. Amidst the current COVID-19 pandemic, a similar fear of AAPIs has taken hold, targeting a population seen as "forever foreigners."

This xenophobia exists even among government leaders, who refer to COVID-19 as the "Chinese virus" and "Wuhan virus."42 This terminology goes against the recommendations of the World Health Organization, which released a statement in 2015 discouraging the practice of naming diseases after geographical locations, individuals, culture, population, industry, or occupation. 43 Around the USA, many reports of racially motivated violence against AAPIs have surfaced and are seemingly escalating both in frequency and severity; these range from racist tirades, rants, and assaults, to a brutal stabbing in New York and the murder of a family in Texas. 44-46 Even healthcare workers are not immune, raising separate concerns on the potential impacts of such racism on healthcare delivery. 47 The frequency of these incidents and the lack of support in official venues have spurred the development of websites such as standagainsthatred.org to permit the reporting of hate crimes.<sup>48</sup> The OCA-Asian Pacific American Advocates, a national non-profit, have called upon the President and US Attorney General to create a task force dedicated to hate crimes against AAPIs.49 To date, however, there have not been any major efforts to prevent the public targeting of Asians. 50 It is incumbent upon healthcare and governmental leaders to combat the spread of hate and racism that has been exacerbated by COVID-19, and to prevent the advent of scapegoating and fear mongering that will only serve to propagate the rapidly emerging disparities among ethnic groups.<sup>51</sup>

# PATHS AHEAD—TARGETED RESEARCH AND INTERVENTIONS

To combat the disparities emerging during the COVID-19 pandemic, multi-level interventions are required. Policy makers and healthcare leaders must heed calls to release racial/ethnic demographic data on COVID-19 infection and mortality. <sup>19, 52</sup> For those states, counties, and cities that have already released them, the completeness and accuracy of the data must be ensured; in Texas, for instance, only a third of deaths have associated racial/ethnic data. <sup>6</sup> We also recommend the identification of PIs as a distinct group within both national and local data, and to similarly do so for all other AAPI ethnic groups. Data should be stratified by socioeconomic status as well as by the primary languages of communities. Only after we identify at-risk populations can further steps be taken, such as outcome monitoring and differential assistance. <sup>19</sup>

Further, government and healthcare leaders should invest in community-based care. By empowering community advocates in key positions, meaningful community and shared governance can be achieved and, thus, promote long-term health equity and self-determination among the hardest hit populations. Multilingual public service announcements are also important for immigrant communities, to ensure access to information on healthcare services and public health measures such as social distancing. Similarly, research must incorporate minority individuals for whom English is not their primary language. Research that excludes non-English speakers leads to a biased sample that over-represents AAPIs who have high levels of education and income. Such bias contributes erroneously to the "model minority" stereotype.<sup>24</sup>

Finally, we must address the prevention and treatment of comorbidities, such as cardiovascular and metabolic conditions, that are rampant within minority communities and are major contributors to their morbidity and mortality during COVID-19.<sup>4</sup> In the multi-ethnic USA, diversity is key to our strength. To focus on minority communities is thus essential, both to mitigate the damage of COVID-19 on these vulnerable populations and to ensure the weathering of this devastating pandemic.

Corresponding Author: Jeffrey J. Hsu, MD, PhD; Division of Cardiology, Department of Medicine, David Geffen School of Medicine at UCLA, University of California, Los Angeles, CA, USA (e-mail: jjhsu@mednet.ucla.edu).

#### Compliance with Ethical Standards:

**Conflict of Interest:** The authors declare no conflicts of interest related to the topic discussed in this article.

#### **REFERENCES**

- Fauci AS, Lane HC, Redfield RR. COVID-19 navigating the uncharted. N Engl J Med 2020;382(13):1268-1269.
- Lipsitch M, Swerdlow DL, Finelli L. Defining the epidemiology of COVID-19 — studies needed. N Engl J Med 2020;382(13):1194-1196.
- Farley JH, Hines JF, Lee NK, Brooks SE, Nair N, Chapman-Davis E.
   Promoting health equity in the COVID-19 era. 2020. Available at:

- https://www.sgo.org/clinical-practice/management/covid-19-resources-for-health-care-practitioners/promoting-health-equity-in-thecovid-19-era/. Accessed May 5 2020.
- Bibbins-Domingo K This time must be different: disparities during the COVID-19 pandemic. Ann Intern Med 2020.
- Raifman M, Raifman J. Disparities in the population at risk of severe illness from COVID-19 by race/ethnicity and income. Am J Prev Med 2020.
- American Public Media Research Lab. The color of coronavirus: COVID-19 deaths by race and ethnicity in the U.S. Available at: https://www. apmresearchlab.org/covid/deaths-by-race#other. Accessed Jul 26, 2020.
- United States Census Bureau. QuickFacts: New York City, New York. Available at: https://www.census.gov/quickfacts/newyorkcitynewyork. Published 2019. Accessed May 4, 2020.
- New York City Department of Health. Rates of cases, hospitalizations and deaths by race/ethnicity. Available at: https://www1.nyc.gov/site/doh/ covid/covid-19-data.page. Accessed May 4, 2020.
- Weng SS, Nguyen PV. Factors affecting elder caregiving in multigenerational Asian American families. Fam Soc 2011;92(3):329-335.
- Kim G, Chiriboga DA, Jang Y, Lee S, Huang C-H, Parmelee P. Health status of older Asian Americans in California. J Am Geriatr Soc 2010;58(10):2003-2008.
- Gordon NP, Lin TY, Rau J, Lo JC. Aggregation of Asian-American subgroups masks meaningful differences in health and health risks among Asian ethnicities: an electronic health record based cohort study. BMC Public Health. 2019;19(1).
- Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. Available at: https:// obamawhitehouse.archives.gov/omb/fedreg\_1997standards. Accessed May 10, 2020.
- Poston B, Barboza T, Reyes-Velarde A. Younger blacks and Latinos are dying of COVID-19 at higher rates in California. Los Angeles Times. April 25 2020.
- Fonseca R Coronavirus cases, death rate "extremely high" among Native Hawaiians and Pacific Islanders in LA county. LAist. April 29 2020.
- PI-CoPCE. Devastating COVID-19 rate disparities ripping through Pacific Islander communities in the U.S. Available at: https://mk0picopce2kx432grq5.kinstacdn.com/wp-content/uploads/2020\_0424-PICOPCE-COVID19-Press-Release.pdf. Accessed May 7, 2020.
- Arnold E. COVID-19 rates disproportionately higher among blacks, Hispanics, Pacific Islanders. Highlands Ranch Herald. April 14 2020.
- APALA. Protecting Asian American and Pacific Islander working people: in response to COVID-19. Available at: https://www.apalanet.org/covid19. html. Accessed May 3, 2020.
- Dorn AV, Cooney RE, Sabin ML. COVID-19 exacerbating inequalities in the US. Lancet. 2020;395(10232):1243-1244.
- Owen WF Jr, Carmona R, Pomeroy C. Failing another national stress test on health disparities. JAMA. 2020.
- McFarling UL. Nursing ranks are filled with Filipino Americans. The pandemic is taking an outsized toll on them. STAT News. April 28 2020.
- Ishii-Kuntz M Intergenerational relationships among Chinese, Japanese, and Korean Americans. J Fam Relat 1997:46(1):23-32.
- Ngo-Metzger Q, Legedza ATR, Phillips RS. Asian Americans' reports of their health care experiences. J Gen Intern Med 2004;19(2):111-119.
- Dhooper SS. Health care needs of foreign-born Asian Americans: an overview. Health Soc Work 2003;28(1):63-73.
- Kim W, Keefe RH. Barriers to healthcare among Asian Americans. Soc Work Public Health 2010;25(3-4):286-295.
- 25. Yancy CW. COVID-19 and African Americans. JAMA. 2020.
- Lee S, Martinez G, Ma GX, et al. Barriers to health care access in 13
   Asian American communities. Am J Health Behav 2010;34(1):21-30.
- Office of Minority Health Resource Center. Profile: Native Hawaiians/ Pacific Islanders. Available at: https://www.minorityhealth.hhs.gov/ omh/browse.aspx?lvl=3&lvlid=65. Accessed May 24, 2020.
- Collins KS, Hughes DL, Doty MM, Ives BL, Edwards JN, Tenney K.
   Diverse communities, common concerns: Assessing health care quality
   for minority Americans: findings from the Commonwealth Fund 2001
   health care quality survey. Commonw Fund 2002.
- Lee J, Ramakrishnan K, Wong J. Accurately counting Asian Americans is a civil rights issue. Ann Am Acad Polit Soc Sci 2018;677(1):191-202.
- Gee GC, Walsemann KM, Takeuchi DT. English proficiency and language preference: testing the equivalence of two measures. Am J Public Health 2010;100(3):563-569.

- Gee GC, Ponce N. Associations between racial discrimination, limited English proficiency, and health-related quality of life among 6 Asian ethnic groups in California. Am J Public Health 2010;100(5):888-895.
- APIAHF. What Asian American, Native Hawaiian, and Pacific Islander community organizations need in the face of the COVID-19 pandemic. https://www.apiahf.org/wp-content/uploads/2020/07/2020.07.16\_ CBONeedsAssessment\_Factsheet\_v4.pdf. Published 2020. Accessed Jul 27, 2020.
- Elkind MSV, Harrington RA, Benjamin IJ. The role of the American Heart Association in the global COVID-19 pandemic. Circulation. 2020;141(15):e743-e745.
- Vaduganathan M, Vardeny O, Michel T, McMurray JJV, Pfeffer MA,
   Solomon SD. Renin-angiotensin-aldosterone system inhibitors in patients with COVID-19. N Engl J Med 2020;382(17):1653-1659.
- Shi S, Qin M, Shen B, et al. Association of cardiac injury with mortality in hospitalized oatients with COVID-19 in Wuhan, China. JAMA Cardiol. 2020.
- Wang D, Hu B, Hu C, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. JAMA 2020;323(11):1061-1069.
- Guan W-J, Ni Z-Y, Hu Y, et al. Clinical characteristics of coronavirus disease 2019 in China. N Engl J Med 2020;382(18):1708-1720.
- Mozaffarian D, Benjamin EJ, Go AS, et al. Executive summary: heart disease and stroke statistics—2016 update. Circulation. 2016;133(4):447-454.
- McKeigue PM, Shah B, Marmot MG. Relation of central obesity and insulin resistance with high diabetes prevalence and cardiovascular risk in South Asians. Lancet. 1991;337(8738):382-386.
- Virani SS, Alonso A, Benjamin EJ, et al. Heart disease and stroke statistics—2020 update: a report From the American Heart Association. Circulation. 2020:141(9).
- Liu M. The coronavirus and the long history of using diseases to justify xenophobia. The Washington Post. Feb 13 2020.
- Chiu A. Trump has no qualms about calling coronavirus the "Chinese Virus." That's a dangerous attitude, experts say. The Washington Post. March 20 2020.
- World Health Organization. World Health Organization best practices for the naming of new human infectious diseases. Available at: https://apps. who.int/iris/bitstream/handle/10665/163636/WHO\_HSE\_FOS\_15.1\_ eng.pdf;jsessionid=B646C7585BC8F003CBD121B8C513B0F7?sequence=1. Accessed May 6, 2020.
- 44. Yan H, Chen N, Naresh D. What's spreading faster than coronavirus in the US? Racist assaults and ignorant attacks against Asians. CNN. Available at: https://www.cnn.com/2020/02/20/us/coronavirus-racist-attacks-against-asian-americans/index.html. Accessed May 5, 2020.
- 45. OCA-Asian Pacific American Advocates. OCA demands apology for Trump tweets that stoke anti-Asian sentiment [press release]. Available at: https://www.ocanational.org/oca-demands-apology-for-trump-tweets-that-stoke-anti-asian-sentiment. Accessed May 5, 2020.
- Ramirez M. FBI says Texas stabbing that targeted Asian-American family was hate crime fueled by coronavirus fears. The Dallas Morning News. March 31 2020.
- Loffman M. Asian Americans describe 'gut punch' of racist attacks during coronavirus pandemic. PBS News Hour. April 7 2020.
- Asian-Americans Advancing Justice. About. Available at: https://www.standagainsthatred.org/about. Accessed May 7, 2020.
- Ahrens RP. [press release]. OCA-Asian Pacific American Advocates. Available at: https://drive.google.com/file/d/1iF6XYlk5XOjP\_Sey\_ TYnfOZqMzMmLuXN/view. Accessed May 5, 2020.
- Campbell AF, Ellerbeck A. Federal agencies doing little about the rise in anti-Asian hate. Available at: https://publicintegrity.org/health/coronavirus-and-inequality/federal-agencies-are-doing-little-about-the-rise-inanti-asian-hate/. Accessed May 7 2020.
- Gee G, Ro M, Rimoin A. Seven reasons to care about racism and COVID-19 and seven things to do to stop it. Am J Public Health [forthcoming].
- Essien UR, Venkataramani A. Data and policy solutions to address racial and ethnic disparities in the COVID-19 pandemic. Insights: COVID-19. Available at: https://jamanetwork.com/channels/health-forum/fullarticle/2765498. Accessed May 5, 2020.

**Publisher's Note:** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.