The Mutually Reinforcing Cycle Of Poor Data Quality And Racialized Stereotypes That Shapes Asian American Health

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Abstract

The Asian American health narrative reflects a long history of structural racism in the US and the complex interplay of racialized history, immigrant patterns, and policies regarding Asians in the US. Yet owing to systematic issues in data collection including missing or misclassified data for Asian Americans and practices that lead to indiscriminate grouping of unlike individuals (for example, Chinese, Vietnamese, and Bangladeshi) together in data systems and pervasive stereotypes of Asian Americans, the drivers and experiences of health disparities experienced by these diverse groups remain unclear. The perpetual exclusion and misrepresentation of Asian American experiences in health research is exacerbated by three racialized stereotypes – the model minority, healthy immigrant effect, and perpetual foreigner – that fuel scientific and societal perceptions that Asian Americans do not experience health disparities. This codifies racist biases against the Asian American population in a mutually reinforcing cycle. In this article we describe the poor-quality data infrastructure and biases on the part of researchers and public health professionals, and we highlight examples from the health disparities literature. We provide recommendations on how to implement systems-level change and educational reform to infuse racial equity in future policy and practice for Asian American communities.

The Asian American health narrative is situated within the complex interplay of racialized history, immigration patterns and policies regarding Asians in the United States - a dynamic that has permeated all levels of US society since the early 1600s.(1) The Asian American population includes East Asian (for example, Chinese and Japanese), South Asian (for example, Bangladeshi and Indian), and Southeast Asian (for example, Filipino and Cambodian) individuals and encompasses a vast array of subpopulations with unique ethnic, cultural, linguistic, and migration profiles. Yet owing to practices that lead to indiscriminate grouping of these unlike individuals together in data systems and inaccurate beliefs held by the general public and research community dictated by longstanding stereotypes of Asian Americans, the drivers and experiences of health disparities experienced by these diverse groups remain unclear.

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The objective of this article is to zero in on two key examples of structural racism in the health context for Asian Americans: poor quality data infrastructure and biases on the part of researchers, health care providers, and the public health community fueled by pervasive stereotypes about the Asian American community (that is, model minority, perpetual foreigner, healthy immigrant). We use examples from the health disparities literature to illustrate these points. To maintain brevity, we do not discuss how racism affects the health or social determinants of health of Asian Americans at the institutional, neighborhood, and individual levels, although we acknowledge the existing and critical scholarship in these areas.(2–5) We then provide recommendations on how to implement systems-level change and educational reform to infuse racial equity in future health policy and practice for Asian American communities.

Data Infrastructure Harms Asian Americans and Other Minority Communities

The COVID-19 pandemic has underscored the deficiency of the research base, data systems, and reporting of data for Asian American communities in the US.(6–9) For example, as of December 21, 2021, in national COVID-19 data, race and ethnicity data were missing for 34 percent of cases and 15 percent of deaths.(10) Although empirical data do not yet exist to demonstrate it in COVID-19 data, prior analyses of administrative data and decades of advocacy and policy research imply that Asian Americans and members of other racial and ethnic minority groups may make up the majority of those whose race and ethnicity data are missing.(11, 12) Many national and local data collection efforts are conducted only in English, thereby excluding those with limited English proficiency who are likely of lower socioeconomic status.(13) To state this more clearly, existing data related to the COVID-19 pandemic are not representative of the US population, as they systematically undercount members of specific racial and ethnic minority groups and overrepresent the Asian American population at the higher end of the socioeconomic distribution. Yet these flawed data are being used to drive funding decisions, policy making, and resource allocation, leaving Asian American communities underresourced and underfunded.

Another issue with the current US approach to collecting data on race and ethnicity is data aggregation, or the grouping of people together into the race and ethnicity categories determined by the US Office of Management and Budget.(14) Grouping such individuals together makes it difficult to understand disparities across the group and develop responsive policy or programs accordingly. For example, during the early phase of the COVID-19 pandemic, based largely on media and community partners' reporting, rather than federal, state, or local data systems, the profiles of essential workers differed by Asian subgroup (for example, Filipinx/a/o front-line nurses and Chinese American food service workers).(6) Opportunities for focused COVID-19 prevention and intervention strategies were missed early on, as routine reporting only included data for "Asian American" essential workers.

Stereotypes Applied To Asian Americans

The perpetual exclusion and misrepresentation of Asian American experiences in health research is exacerbated by three racialized stereotypes – the model minority, healthy

immigrant effect and perpetual foreigner – that fuel scientific and societal perceptions that Asian Americans do not experience health disparities.

Model Minority

The model minority myth is the perception of high academic and economic achievement among Asian Americans. It is a concept rooted in anti-Blackness through the false proximity of Asian Americans to Whiteness.(15) The model minority stereotype has been used to deny the existence of institutional racism, to illustrate that individual underperformance explains racial inequality in American society, and to pit Black Americans and Asian Americans against one another to uphold the narrative of White supremacy.(16) The Black-Asian conflict is perpetuated by policy, media, and in some cases researchers themselves. Fortunately, multiple perspectives on the problematic history of this conflict are being re-introduced to enhance allied understanding between Black Americans and Asian Americans. (17) New research also supports the detrimental effects the pandemic has had on both Black and Asian American communities,(18) furthering the dialogue of solidarity.

To be clear, no empirical evidence exists to support extraordinary academic abilities in Asian Americans.(19) Instead, throughout history but especially in the 1960s and 1990s, the composition of the Asian American population has been shaped by the need for a skilled workforce, and therefore by US immigration policies, and the visibility of these high-achieving attributes has been perpetuated through media and even erroneously through research papers or government reports. Accordingly, Asian Americans are thought to merit neither resources nor attention as an ethnic minority group within the American population. (20)

Healthy Immigrant Effect

The healthy immigrant effect is the concept that immigrants display better health than their US-born counterparts, despite overall lower socioeconomic status and limited access to resources, which obscures nuances related to migration trends over time and ignores changes in health in the global environment (that is, the sending countries). Despite inconsistent and limited empirical evidence,(21) this pervasive narrative has significant effects on health policy, research, and practice by framing the way in which minority and immigrant health is studied and how resources are allocated to address health disparities.

Within the context of the diverse Asian American population, universal application of the healthy immigrant effect has proven to be especially problematic. There is significant heterogeneity in the effect of duration in the US on Asian American health.(21) Importantly, several methodological problems exist in the literature, including inconsistencies in how key variables are conceptualized by survey participants or defined by researchers.(22) Assuming that duration in the US affects the health of all Asian immigrants in a uniform way is inaccurate and misleading for both research and practice, but without data and reporting that capture Asian Americans, Asian American subgroups, nativity, and other migration-related factors, these assertions remain largely unchallenged.

Finally, the idea of the healthy immigrant effect places disproportionate emphasis on individual health behaviors (for example, diet, physical activity, health care seeking) rather

than the environmental and political factors that shape health. This narrative overlooks the role of structural racism and how it can block socioeconomic mobility and integration of immigrants into their new environments.(23)

Perpetual Foreigner

Throughout history, xenophobia and racism have positioned Asians as permanently foreign regardless of how long they or their families have lived in the US, manifesting as the perpetual foreigner stereotype. Claire Kim describes the processes of "civic ostracism," in which Asian Americans are positioned as "unassimilable with Whites on cultural and/or racial grounds in order to ostracize them from the body politic and civic membership."(24) This civic ostracism has been weaponized to control the boundary between Asians and Whiteness and to maintain White supremacy.

Notably, the perpetual foreigner stereotype has allowed for widespread scapegoating of Asian Americans in times of national hardship, particularly relating to disease outbreaks and economic downturn (that is, "yellow peril"),(25) drawing on the imagined association between foreignness and disease(26) as well as upholding the status, image, and power of White Americans and diverting attention away from systemic issues.(25)

The perpetual foreigner stereotype has also manifested in racist and discriminatory perceptions about Muslim and South Asian populations as a threat to national security, spurring hate incidents targeted at South Asian, Muslim, Sikh, Hindu, and Middle Eastern communities that surged in the wake of the 9/11 attacks and again after the election of former president Donald Trump.(25, 27) In 2017 this culminated in Executive Order 13769, commonly known as the "Muslim Ban," that barred entry to the US for people from seven predominantly Muslim countries. A study of health care use before and after the ban found immediate changes in health care seeking after its passage.(27, 28)

Anti-Asian hate incidents, primarily directed at East and Southeast Asians, have skyrocketed since March 2020.(29) The repeated use of inflammatory terms by conservative leadership and media to describe COVID-19, such as the "Wuhan Coronavirus", "Chinese virus" or "Kung Flu," inspired hate and directed blame for the pandemic toward Asians and Asian Americans. This rhetoric has resulted in increased negative social media posts and tweets referencing Asians(30) and of anti-Asian bias.(31) This demonstrates the close and mutually reinforcing link between the perpetual foreigner stereotype and the damaging scapegoating and racism it enables.

The perpetual foreigner stereotype plays out in the lived experience of Asian American individuals, with comments such as, "You speak such good English."(31) We posit that the perpetual foreigner stereotype persists, in part, because of the day-to-day interactions that Americans, both Asian and non-Asian, have with Asians in the US. The percentage of the Asian American population that was born in a different country has remained steady at roughly 65 percent for the past thirty years. In other words, when one encounters an Asian person in America, two-thirds of the time that Asian person will not have been born here or may speak with an accent (that is, is a 'foreigner'), and this impression is further paired with physical attributes (for example, skin color and eye shape). White Americans, whether

they are earlier or more recent immigrants, visually – based on appearance and skin color - become a part of the majority and are treated as such,(32) whereas Asian Americans are not afforded the same sense of belongingness and inclusion.

How Poor Data Infrastructure And Stereotypes Influence Health Outcomes

Poor data infrastructure and the three stereotypes described each individually act to influence health outcomes. The first aspect of poor data infrastructure - that Asian Americans are not adequately captured in existing data or health research – has led to the development of evidence-based practice that does not appropriately treat Asian Americans (for example, medication titration for cardiovascular or mental health and cardiovascular clinical algorithm development).(33–35) In some cases, the combination of advocacy and academic research has resulted in change of practices, such as lowering the body mass index threshold from 25 kg/m^2 to 23 kg/m^2 for diabetes screening in Asian Americans,(36) although these scenarios are rare.

The second aspect of data infrastructure, the aggregation of Asian subgroups, is also problematic for health outcomes and research. For example, an analysis that examined the leading causes of death among Asian American subgroups revealed that when data were aggregated, cancer was the leading cause of death for Asian Americans.(37) But when data were disaggregated, heart disease was the leading cause of death for Asian Indians, not cancer.(37) Data disaggregation is therefore useful if it reveals subgroup differences that lead to more appropriate strategies to improve the health of different subgroups.

The challenge with data disaggregation, however, is that this is often not the way data are used, in part because of limited resources and finite funding for racial and ethnic minority communities in general, and for Asian Americans in particular. Instead, the typical practice is not to allocate money toward Asian American subgroups in a more tailored fashion, but rather, to focus on a select number of priority Asian subgroups while leaving other subgroups behind. This process is exacerbated by limited time in making such allocation decisions, whether driven by national emergencies, political tenure of policy makers, or federal and state fiscal years.

The challenge for Asian American health research does not end at the availability of data but extends to data reporting. More specifically, because of the model minority stereotype, the Asian American community is often seen as "healthy" by the general public, media, and researchers.(20, 38) Data that demonstrate low disparities in Asian Americans or Asian subgroups are used to reaffirm stereotypes that people hold about Asian Americans. Data interpretation is not purely objective. When data reaffirm one's internal beliefs, one feels confident. Or, in the case of Asian Americans, when the data show low disparities in this community, people feel reaffirmed in their belief that Asian Americans are healthier instead of taking the time to unpack what might be going on under the surface (that is, implicit bias that results from portrayal in the media or overrepresentation of high-income, healthier Asian Americans in data samples).

The healthy immigrant effect intersects with the impact of the model minority stereotype, but also it can extend to interpretation of analyses or initiatives. "Ethnic enclaves" that developed because of racist policies concerning where early Chinese and Japanese immigrants were allowed to work and live are at times conceptualized through a lens of healthful thriving despite the dismantling of this narrative by scholars starting more than a decade ago.(39) This narrative has been echoed during the COVID-19 pandemic, with relief funding for low-income neighborhoods omitting hard hit areas as Chinatowns in a complex interplay of discrimination, zoning, and zip codes.(40)

The perpetual foreigner stereotype has been shown to have widespread individual-level and systemic effects,(41) generally creating barriers for economic mobility and integration and resulting in economic disadvantage and chronic stress that can lead to poor health outcomes.(31) Anti-Asian racism during the COVID-19 pandemic is a manifestation of this, producing widespread fear, economic stress, and mental health issues in the Asian American community, extending beyond the individual into effects on small businesses, experiences of vicarious racism, and a loss of security and sense of belonging in the US.(42)

The Mutually Reinforcing Cycle And Endless Feedback Loop

The data infrastructure and stereotypes also interact and reinforce each other. For example, the healthy immigrant effect plays into the conceptualization of the model minority, offering a convenient perspective to reinforce the omission of Asian Americans in health research analyses or reporting,(43, 44) even if the cited exclusion criteria are objective (for example, small sample size). Similarly, the model minority and perpetual foreigner stereotypes are complementary but oppositional characterizations of Asian Americans, valorizing or demonizing Asian Americans depending on what is convenient for the sociopolitical narrative at that time.(45, 46) These stereotypes praise Asian Americans for their "cultural values" and success and, therefore, justify exclusion from data collection and reporting, (47) social safety net systems,(48) diversity, equity, and inclusion discussions,(49, 50) health research funding,(51) and media coverage(38, 52), while simultaneously othering the community and keeping them at arm's length.(46, 53)

The sum of these stereotypes is a narrow, acceptable band in which Asian Americans are allowed to exist in US society; existence as an unassimilable horde; conflation (for example, applying evidence-based practice from Japanese Americans to all Asian Americans);(54) or worse, invisibility. Together, these stereotypes stigmatize and marginalize Asian Americans, to effectively restricting social and health resources intended for them. The omission of Asian Americans in research and public funding then codifies racist stereotypes and biases of the Asian American population in a mutually reinforcing cycle.

This intersection of data and stereotypes and the impact on health may be illustrated through a simplified example on sugary drink policy. Nutrition policy, programming and advocacy have focused on sugary drinks as a target to improve children's obesity risk given that they are a key contributor to added sugar intake for White, Black and Latinx/a/o children. However the evidence and data used to build such momentum largely excluded Asian American children. When new data became available showing that Asian American children

have low sugary drink intake,(55) these data probably could be and have been used to reinforce the idea that Asian American children need not be a part of the policy dialogue because they are already "doing all right" (that is, model minority). This exclusion from policies then codifies the idea that Asian Americans are a healthy population (that is., healthy immigrant effect).

The problem, however, is that despite having a lower prevalence of obesity,(56) Asian American children have equivalent risk of other obesity-related outcomes, such as nonalcoholic fatty liver disease(57) – suggesting that some unmeasured dietary disparity might exist. In addition to scholarship, grassroots efforts and community listening sessions identifying key cultural sources of added sugars(58–60) we found that Asian American children in national data consumed high- glycemic-index diets driven not by sugary drinks but by white rice consumption.(61)

Therefore, a more appropriate and inclusive nutrition strategy to improve obesity in children would be to target white rice consumption in Asian American children while simultaneously targeting sugary drinks in the general population and complementing these actions with specific culturally appropriate messaging for Asian subgroups and food items. This is the type of multisector action and inquiry that are needed to break the cycle of data and stereotypes to improve the Asian American health narrative – it is complex, yes, but not impossible.

RECOMMENDATIONS

Improve Data Collection and Reporting

Although several states, including California, Oregon, Minnesota, and New York, have made progress on improving data collection and reporting of racial and ethnic subgroup data (or disaggregated) data, many federal, state, and local data systems continue to only capture broad racial and ethnic categories.(62–64) Here we present a few key considerations to improve the collection and reporting of data on Asian American communities, as well as all racial and ethnic groups.

Standardize Data collection and Reporting: Demographic misclassification within health systems data is a concern for other racial and ethnic minority communities who are invisible in data (for example, Caribbean or African Blacks; Latinx/a/o subgroups, and Arab Americans), whereas exclusion from analyses is a concern for multiracial (for example, Asian-Black) or multiethnic (for example, Chinese-Korean) individuals.(65) This opportunity to understand more about these important and growing subgroups should be embraced.

Update Data Systems: Although the up-front costs to change data systems may be significant, the collection and reporting of better demographic data can help improve the allocation of resources based on the needs of specific racial and ethnic populations and result in long-term cost savings. Funding should be specifically allocated to achieve these objectives.

Involve the Community: The perspectives of key community stakeholders and public input must be solicited and integrated in the pursuit of health equity by identifying meaningful disaggregated racial and ethnic data categories for collection, analysis, and reporting.(66)

Revisit Outdated Conceptualizations and Practices

We invite the policy, academic and broader communities to think critically about how the conceptualizations and practices for Asian Americans can change. Drawing from the research experience of ourselves and others, this may be operationalized as follows:

Leverage commonalities Across Groups: To date, much of disparities-driven research and health agenda setting have been divided along racial and ethnic lines, highlighting differences between populations, rather than similarities. We recommend a shift towards framing within broader categories, such as immigration experience. Immigration has been identified as an important social determinant of health, embodying structures and policies that reinforce positions of poverty, stress, and limited mobility with common yet distinct pathways across Asian American, Latinx/a/o, and Arab American communities.(67, 68) Through the design of policy and research that play on the generalities and strengths of immigrant families yet preserve unique sociocultural aspects of different cultures, we propose that researchers look across racial and ethnic lines and create a new ethos of cohesion across researchers currently segmented within this space.

Provide Education at All Levels of Society: In addition to improving data systems, to dispel the three stereotypes, society needs to better understand the Asian American experience and, more specifically, the portrayal of the significant contributions that people of Asian descent have made to this country, the origins of racialized tensions, and the history of immigration policy shaping population demographics and education levels. Very little of the Asian American experience in the US and history is taught in K-12 or university education. Recent progress towards improving the education curriculum to include Asian Americans is promising.(69, 70) It's only through this type of understanding that Americans can start to truly think of Asian Americans as Americans.

CONCLUSION

In a complex interplay of historical practices, data infrastructure, and racialized stereotypes, Asian Americans are often not included at one of these three junctures: in the data collection process, at the data analysis stage, or in the reporting process. Although it may seem trivial at the microscale, or in some cases statistically necessary (for example, because of small sample sizes), the sum effect of these choices across hundreds of thousands of research articles is invisibility. Yet, the Asian American population is nearly twenty million individuals according to the 2020 census estimates(71) and is projected to increase during the next several decades, as it is the fastest-growing racial and ethnic group in the US. Understanding the dynamics of the social, political, and legal environment can be used to critically examine how structural racism manifest and persist, fuel anti-Asian violence, and work in opposition to inclusive health policies in the US.

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