



## Serving the Underserved

The following article is part of a five-issue series focused on caring for patients in underserved populations. Inspired by several sessions at Kidney Week 2023, this series features unique patient and physician perspectives, explains legal protections and limitations, and seeks to identify opportunities to improve kidney care for these communities.

# Transforming Kidney Care for Fast-Growing Asian American, American Indian, and Alaska Native Populations

By Bridget M. Kuehn

Asian American, American Indian, and Alaska Native communities are three of the fastest-growing populations in the United States. Yet their kidney care needs often go unrecognized or are inadequately met, according to speakers at the “Serving the Underserved: Improving Kidney Health in Underserved Populations” session at Kidney Week 2023 in Philadelphia, PA. Individuals from these communities and clinicians partnering with them are working to change that. Leslie Wong, MD, MBA, FACP, FASN, chief kidney health officer and senior medical director of medical specialties at Intermountain Health in Salt Lake City, UT, shared his perspective on the multitude of cultures that make up the Asian American population, their kidney needs, and the recently launched Coalition of Asian Americans Transforming Opportunities in Nephrology (CATION+). He noted that currently used metrics may not accurately estimate kidney function in Asian Americans or assess their body mass index (BMI) and that they remain woefully underrepresented in nephrology and other health research.

“Asian Americans are a rapidly growing segment of the US population and are at risk for CKD [chronic kidney disease],” Wong said. “Attention is desperately needed to ensure kidney health equity is appropriately addressed for Asian Americans.”

Vallabh “Raj” Shah, PhD, distinguished and regents’ professor at The University of New Mexico School of Medicine, Albuquerque, shared how community health workers providing culture-centered care may help to address persistent health disparities among Native Americans, including American Indian and Alaska Native people in the United States. He also emphasized the importance of greater support for health systems serving Native American communities and for public health approaches to tackling social determinants of health.

“To begin to put Native Americans on a path to health equity, adequate funding that supports evidence-based, outcome-based, and community-based approaches is essential,” Shah said.

### Not a monolith

By 2060, the US Asian American population is projected to more than double from 17.8 million to 46 million people (1), making it one of the largest racial or ethnic groups in the country, Wong said. Fifteen in 100 Asian Americans 65 years and older live with CKD. Nearly one-half the Asian American population is concentrated on the West Coast, about one in four live in the South, and substantial populations exist across the country, he added. People of Chinese, Filipino, Indian, Japanese, Korean, and Vietnamese origins make up the largest Asian American subgroups in the United States, according to the Pew Research Center (2). “It is a rich mosaic of ethnicities, culture, and heritage,” he said.

Social determinants of health, such as income levels, may also vary widely across Asian American ethnic groups. Wong noted that a common stereotype is that Asian Americans are well-educated and wealthy, but educational and income levels vary across or within subgroups. Language barriers, levels of health literacy, and ability to navigate the health care system may also vary across subgroups, he said. Other demographics can also have a substantial influence on health behaviors. For example, high-risk health behaviors like smoking were higher among Asian American males born in the United States compared with Asian individuals born elsewhere. Additionally, Asian Americans who were married and college educated and earned a higher income had lower risks of diabetes or hypertension than Asian Americans from groups with fewer social supports. “We know [that] different cultures, different beliefs, all influence important health behaviors,” he said.

While their ancestry may vary, Wong noted that many Asian Americans feel a sense of shared identity and noted examples, such as the central role of rice in many Asian cuisines and shared difficulties with assimilation and anti-Asian racism. Asian Americans are also increasingly involved in advocating for their communities, he said. “Asian Americans have a stereotype of being silent, not wanting to be heard, but it is clear that the majority of Asian Americans want a voice, they want a leader, they want leaders to speak up and represent their interests,” Wong said.

### Underrecognized diseases

Overall, Asian American adults have approximately 50% higher proportional kidney disease mortality than non-Hispanic White adults, and Filipino American adults have the highest proportional mortality, more than twice that of White adults and approximately 10% higher than Black adults (3).

The presentation of kidney diseases in Asian Americans may also differ. Wong noted that Asian American patients often have higher albuminuria but are at a lower risk of having reduced estimated glomerular filtration rates (eGFRs) compared with White patients. For example, one study found 1.35 higher adjusted odds of elevated albuminuria among Asian patients and 2.77 higher adjusted odds of severe albuminuria (4). “There seems to be a clear signal for increased albuminuria in this population,” he said.

Additionally, Wong cited studies that indicate country-specific differences in eGFRs across those in South Asia, suggesting that developing country-level ethnic adjustments may be necessary to achieve accurate kidney function assessments (5). He proposed that using the creatinine–cystatin C equation may provide more accurate kidney function estimations than equations based on either biomarker alone (5). “If you use creatinine–cystatin C, it is a little better, but it is still not as accurate as developing and using that country-specific eGFR,” he said.

Using the race-free CKD-Epidemiology Collaboration, however, may reclassify many Asian patients to a lower (better) CKD stage (6). “You have to wonder and ask what systematic bias might be created by the equations if they are not adjusted for these specific American populations,” he said.

Wong noted that Asian Americans have lower rates of diabetes than Black or Hispanic people but much higher than White people. Furthermore, the American Diabetes Association recommends a lower BMI threshold for Asian individuals because what may be a healthy BMI in other racial or ethnic groups may be, in fact, overweight in Asian populations (7), and failing to correct for that may skew risk stratification or management.

Despite some of the unique needs of Asian Americans, little research has been dedicated to understanding how to best care for them. A National Institutes of Health (NIH) consensus report published in the *Annals of Internal Medicine* found that just 0.17% of its budget is spent on research on Asian Americans, Native Hawaiians, or Other Pacific Islander populations, and only 2% of NIH trial participants are representative of these groups (8). With such low representation, uncovering data on the diverse subgroups is near impossible. A recent analysis also found that Asian Americans are underrepresented in kidney disease research as well (9). “Underrepresentation of Asian American populations in health research both undermines health equity and limits important scientific discoveries that would advance prevention in disease clinical care,” Wong said.

Inadequate population samples may also contribute to disparities in kidney care. For example, Asian American people make up 8.5% of candidates on the US organ transplant list but only receive 5.7% of the allografts compared with White candidates who make up 40% of the transplant waitlist but receive 55% of the allografts (10).

To help better address these disparities and improve kidney care for Asian American patients, Wong partnered with other Asian American colleagues to create CATION+. Informal conversations among Asian American colleagues during the COVID-19 pandemic about their experiences with anti-Asian hate or workplace discrimination led to the group’s formation. The group hopes to raise awareness, fill data gaps, and create resources for addressing kidney diseases in the Asian American population. It also hopes to address the underrepresentation of Asian American nephrologists in faculty and leadership positions, provide mentors and role models for students and trainees, and help reduce workplace bias. “If we can energize, align, and empower Asian American nephrologists nationally, it would be such a great addition to overall efforts to improve health equity for all minority patient populations and ensure we are adequately represented in our health care institutions,” Wong said.

### Disproportionate burdens

Between 2000 and 2017, the population of American Indian or Alaska Native people in the United States grew by 26%, from 2.6 million to 5.6 million, according to US Census Bureau data (11). Shah said this growth rate is twice as fast as the US population. Some American Indian and Alaska Native communities face extraordinarily high rates of kidney diseases. For example, 18% of people in the Zuni communities in New Mexico, where Shah works, experience kidney failure compared with 1.2% in the US population and 3.1% of American Indian and Alaska Native people nationwide.

Efforts to curb high rates of kidney failure in this population have had some success. For example, between 1996 and 2013, ESKD rates dropped by about half from 57.3 to 26.5, according to data from the US Centers for Disease Control and Prevention (12). “The impact [kidney failure] on communities is really widespread,” Shah said. “[Despite] pockets of good news, well-documented challenges and underfunding remain.”

Shah noted that individuals from 573 federally recognized tribes are eligible for care through the Indian Health Service (IHS). However, approximately one-half of American Indian and Alaska Native people with low incomes are uninsured. As a result of colonialism and resulting economic adversity, these communities face a disproportionate disease burden, lower life expectancies, inadequate education, and other hardships. He noted that 12% of households in these communities lack safe water and waste-disposal services.

Chronic underfunding of the IHS and its clinics, which may serve individuals across 100 or 200 miles, contributes to care gaps and fragmented care, he said. Often, individuals do not receive guideline-directed care, and the nation’s first people often receive “second-class care,” according to Shah. He also said it could be challenging to work as a health care professional in these communities that include individuals who may distrust them because of historical wrongs against their community and may blame, as Shah articulates, “white flour, white sugar, and White people” for the health disparities they face.

Shah emphasized the need for cultural sensitivity among practitioners and for engaging patients in their care. He said this should include understanding community values, beliefs, and ways of life. It may also include considering health care access, age, gender, abilities, sexual orientation, religion, socioeconomic factors, community resiliency, and community trauma. “You have to think about cultural considerations,” he said. “You have to treat the person first.”

He cited a review highlighting the need to incorporate translators, traditional practices, respect for elders, support for caregivers, storytelling and Indigenous art, and culturally consistent and community-based health care resources and personnel (13). The review also cited the need for clinicians to address the harmful legacy of colonialism, address adverse assumptions or stereotypes, listen intensively to convey respect, work with Indigenous clinicians, pay community members for cultural training of health care workers, and respect a role for traditional practices like “smudging,” a practice that involves burning plants for purification or cleansing, in dialysis or other patient care.

### Culture-centered care

Shah and his colleagues launched a culturally congruent care program using community health workers as frontline agents for change. He said the initial cohort of local community health workers began as high school graduates and continued with the program, and now a few have nursing degrees. The team has improved access to health care, increased health screening, promoted better understanding between the community and the health team, bolstered guideline-directed care, and reduced the need for emergency and specialty services. The team also provides a bridge between the health system and the community. “They are familiar with the culture and language,” he said. “They can leverage the influence of peer and social support in health care decision-making.”

Shah said it is vital for programs using community health workers to recognize their dual roles as community members and clinicians and help integrate them into local health care systems. Health systems, he said, should implement concomitant, systems-level improvements and provide continuous development opportunities for community health workers and other clinicians. He emphasized the importance of storytelling, such as survivor stories, and providing opportunities for community health workers to “teach back” in their communities.

According to Shah, it is also essential to go beyond focusing on a single disease. He conducted a randomized clinical trial of community health care workers in the Zuni community, in which 48 patients were randomized to usual, clinic-based care and 50 to home-based care, including lifestyle coaching and later, reinforcement of self-monitoring, medication adherence, diet and exercise changes, and use of stress-coping strategies (14). The study monitored patients for 12 months and found that the home-based care group had higher patient-activation scores, lower BMI and reduced hemoglobin A1c levels, threefold reductions in C-reactive protein, and improved mental health screening scores.

Shah shared a toolkit for clinicians and researchers working with rural and health disparity communities (15). He also highlighted the need for more programs aimed at reducing chronic disease in American Indian and Alaska Native populations, increasing access to specialists for these communities, and building a more robust pipeline of Indigenous health professionals. “A strong investment in public health and illness prevention is essential to turning the tide on severe chronic illness in these populations,” he concluded. ■

### References

- Budiman A, Ruiz NG. Key facts about Asian Americans, a diverse and growing population. Pew Research Center. April 29, 2021. Accessed November 15, 2023. <https://www.pewresearch.org/short-reads/2021/04/29/key-facts-about-asian-americans/>
- Ruiz NG, et al. Demographic profile of Asian American adults. Pew Research Center. May 8, 2023. Accessed November 15, 2023. <https://www.pewresearch.org/race-ethnicity/2023/05/08/asian-american-identity-appendix-demographic-profile-of-asian-american-adults/>
- Claudel SE, et al. Kidney disease-related mortality among Asian Americans. *Kidney Med* 2023; 5:100676. doi: 10.1016/j.xkme.2023.100676
- Kataoka-Yahiro M, et al. Asian Americans & chronic kidney disease in a nationally representative cohort. *BMC Nephrol* 2019; 20:10. doi: 10.1186/s12882-018-1145-5
- Wang Y, et al. Performance and determinants of serum creatinine and cystatin C-based GFR estimating equations in South Asians. *Kidney Int Rep* 2021; 6:962–975. doi: 10.1016/j.ekir.2021.01.005
- Betzler BK, et al. Impact of Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) GFR estimating equations on CKD prevalence and classification among Asians. *Front Med (Lausanne)* 2022; 9:957437. doi: 10.3389/fmed.2022.957437
- Hsu WC, et al. BMI cut points to identify at-risk Asian Americans for type 2 diabetes screening. *Diabetes Care* 2015; 38:150–158. doi: 10.2337/dcl4-2391
- Kanaya AM, et al. Knowledge gaps, challenges, and opportunities in health and prevention research for Asian Americans, Native Hawaiians, and Pacific Islanders: A report from the 2021 National Institutes of Health Workshop. *Ann Intern Med* 2022; 175:574–589. doi: 10.7326/M21-3729
- Soomro QH, et al. Representation of racial and ethnic minorities in nephrology clinical trials: A systematic review and meta-analysis. *J Am Soc Nephrol* 2023; 34:1167–1177. doi: 10.1681/ASN.0000000000000134
- Hall YN, et al. Differential mortality and transplantation rates among Asians and Pacific Islanders with ESRD. *J Am Soc Nephrol* 2005; 16:3711–3720. doi: 10.1681/ASN.2005060580
- US Census Bureau. American Indian and Alaska Native data links. December 16, 2021. Accessed November 15, 2023. <https://www.census.gov/about/partners/cic/resources/data-links/aian.html>
- Bullock A, et al. Vital signs: Decrease in incidence of diabetes-related end-stage renal disease among American Indians/Alaska—United States, 1996–2013. *MMWR Morb Mortal Wkly Rep* 2017; 66:26–32. doi: 10.15585/mmwr.mm6601e1
- Smith M, et al. Furthering cultural safety in kidney care within Indigenous communities: A systematic and narrative review. *Kidney Med* 2021; 3:896–904. doi: 10.1016/j.xkme.2021.04.023
- Nelson RG, et al. Home-based kidney care, patient activation, and risk factors for CKD progression in Zuni Indians: A randomized, controlled clinical trial. *Clin J Am Soc Nephrol* 2018; 13:1801–1809. doi: 10.2215/CJN.06910618
- Southwest Clinical Trials Network. Explore toolkit. March 21, 2023. Accessed December 21, 2023. <https://sites.google.com/view/nmexploretoolkit/home#h.3fs33ufsdfdb>