APIAHF

Health Brief

ASIAN AMERICANS, NATIVE HAWAIIANS & PACIFIC ISLANDERS AND CARDIOVASCULAR DISEASE

CARDIOVASCULAR DISEASE

Cardiovascular disease (CVD) is the leading cause of death for all Americans. Almost 700,000 people die of heart disease in the U.S. each year, which is about 29% of all U.S. deaths.[1] More men and women over 45 years old die from CVD than any other disease. Cardiovascular diseases include both heart disease and stroke. In 2007, the American Heart Association estimated CVD would cost Americans a projected $432 billion in medical expenses and lost productivity—our nation's most costly disease.[2] Moreover, stroke treatment alone is projected to exceed $2 trillion between 2005 and 2050.[3]

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PREVALENCE

South Asians have been reported to have one of the highest rates of coronary artery disease of any ethnic group studied.

Cardiovascular disease takes a tremendous toll on all communities in the United States. CVD serves as the leading cause of death among Asian American, Native Hawaiian and Pacific Islander (AA & NHPI) communities, accounting for 32.9% and 33.5% deaths among AA & NHPI men and women, respectively.[4] However, there is little information on health risks and disability caused by CVD on AA & NHPI populations. Compared to other Americans, South Asians have twice the risk of developing heart disease even when there is a lower or equal occurrence of traditional risk factors such as smoking, hypertension, high cholesterol, and obesity. Research shows that while only 9 percent of whites develop coronary artery disease, between 18 and 25 percent of South Asian immigrants eventually develop it.[5]

Overall, Asian American adults are 50% less likely to die from heart disease than non-Hispanic white adults (6.8% v 11.7%, respectively).[6] In contrast, Native Hawaiians and Pacific Islanders are 40% more likely to be diagnosed with heart disease as Non-Hispanic whites (16.6% v. 11.7%, respectively). However, ethnic specific samples show tremendous variation among AA & NHPI subgroups.[7] A report from the National Center for Health Statistics (NCHS) found heart disease and cancer to be the two leading causes of death among Chinese Americans, Japanese Americans, Filipino Americans, Hawaiian, Asian Indian, Korean Americans, Vietnamese Americans, Guamanian, and Samoans. Stroke was the third leading cause of death for Chinese, Japanese, Hawaiian and Filipino ethnic groups. Among Asian Indian, Hawaiian, Guamanian, Filipino, Samoan, Japanese, Chinese, and Korean communities, heart disease claimed over 22 percent of all deaths.[8]

- Among Native Hawaiians, heart disease mortality rate is 44% higher and stroke mortality rate is 31% higher than other U.S. races. They also rank high in the known associated risk factors for CVD including obesity, hyperlipidemia, elevated blood pressure and cigarette smoking.[5]
- Native Hawaiians have a 43% higher mortality rate due to heart disease and a 46% higher mortality rate due to stroke than for the state of Hawai'i overall.[9]
- Heart disease is the leading cause of death for Hawaiians and Samoans beginning at the age of 25.

Native Hawaiian mortality due to heart disease is 43% higher than for the state of Hawai'i overall.

It is important to note that the statistics on death rates are likely to underestimate actual deaths due to CVD and other diseases among AA & NHPI populations. Researchers have found that the race listed on death certificates for AA & NHPI populations is often misclassified. The net effect of this misclassification is an underestimation of deaths and death rates for AA & NHPI populations.[10]

DIETARY PRACTICES

With acculturation come changes in eating habits. The longer immigrants have been in the U.S., the more likely they are to adapt to Western lifestyles. Traditional meals that once consisted of rice, vegetables, and fish are replaced with the fatty meats, dairy products, and high-calorie snacks and desserts typical of the Western diet.

One study indicated that leaders in the Cambodian, Filipino, and Vietnamese communities expressed that increased variety, abundance, and affordability of foods in the U.S. were barriers to having a healthier diet.[11] Moreover, social situations and the need for "comfort food" made it challenging to eat healthier foods.

There is still only limited research on the nutrition and eating habits of AAs & NHPIs. However, the importance of this factor to understanding CVD is enormous and needs to be addressed by mainstream nutrition education efforts.

RISK FACTORS

Risk factors such as age, gender, and heredity contribute significantly to the development of cardiovascular disease. There have been few studies which have examined risk factors for CVD specifically

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among AAs & NHPIs, and many of these studies have been limited in scope due to inconsistent data collection methods and a lack of standardized definitions. In order to facilitate comparisons between ethnic subgroups, future studies will need to standardize the methodology and analysis of risk factors. Despite these limitations, existing research does provide convincing evidence that the risk factors below influence the severity of CVD among the general population as well as among Asian American, Native Hawaiian and Pacific Islander communities:

- Alcohol and tobacco use/exposure
- High blood pressure and high blood cholesterol
- Obesity
- Physical inactivity
- Diabetes
- Stress
- Health care access

High blood pressure and obesity are often associated with death due to CVD. According to one study, Filipinos have high hypertension rates, higher than those of non-Hispanic Whites, who have a 38% prevalence of hypertension and nearly equal to that of Blacks, who have a 60% prevalence rate, in a sample of 6,814 adults aged 45-85 years old.[12] In addition, low rates of physical activity also contribute to cardiovascular deaths. The Centers for Disease Control and Prevention (CDC) report that among Asians and Native Hawaiians and Pacific Islanders, 21.2% of men and 27.0% of women reported no leisure-time physical activity. Of these, 21.5% were overweight and 23.8% were obese.[13] Higher mortality rates are also found in modernized areas compared to traditional areas. Research also shows that some immigrant populations experience more problems with CVD than people in their native countries.

- Certain risk factors put Native Hawaiians at greater risk for CVD than other ethnic groups in Hawai'i including a 36% higher rate of cigarette smoking, 32% higher prevalence of diabetes, and 51% higher rate of obesity.[14]

While a single risk factor may be sufficient to cause CVD, a combination of factors increases the likelihood of acquiring the disease. For example, a diabetic person has approximately a two- to eight-fold greater risk of heart failure than someone without diabetes.

PREVENTION AND INTERVENTION

Health promotion and intervention methods must consider the social, economic, and cultural aspects of AA & NHPI subpopulations when developing services for prevention, screening, and treatment of cardiovascular diseases. Eating a healthy diet rich in fruits, vegetables, and low-fat dairy products in combination with a physically active lifestyle can help promote cardiovascular fitness. However, the majority of AAs & NHPIs encounter barriers such as:

- Lack of CVD awareness
- Fear
- Cultural conflicts
- Language barriers
- Poor accessibility
- Poverty

Only when we look at the needs of each of our communities in a holistic way can we hope to serve AA & NHPI populations effectively.

DIRECTIONS FOR FUTURE RESEARCH

Asian Americans, Native Hawaiians and Pacific Islanders are the fastest growing ethnic/racial group nationwide. AAs & NHPIs represent nearly 50 separate ethnic groups with distinct languages and cultures. Yet, the diversity of this population was never adequately recorded in national surveys. Asian Americans, Native Hawaiians and Pacific Islanders have historically been viewed as a homogenous group. Although disaggregated data is available for some AA & NHPI populations, immigrant communities and certain AA & NHPI subgroups often remain excluded.

To date, an accurate and comprehensive profile of CVD among AAs & NHPIs is still unknown, due mostly to the lack of adequate baseline data and available disaggregated data for all AA & NHPI ethnic subgroups in the national data systems. The availability of this data is critical to accurately measuring the impact of cardiovascular disease among AA & NHPI populations.

RESOURCES

For more information on cardiovascular disease in AA & NHPI communities:

- American Heart Association, *Asian/Pacific Islander and Cardiovascular Diseases Biostatistical Fact Sheet*
  http://www.americanheart.org/statistics/biostats/bioas.htm

- National Heart, Lung and Blood Institute (NHLBI), National Institutes of Health (NIH):
  - *Addressing Cardiovascular Health in Asian Americans and Pacific Islanders: A Background Report, 2000. NIH Publication No. 00-3647.*
  - *Asian American and Pacific Islander Workshops: Summary Report on Cardiovascular Health, 2000. NIH Publication No. 00-3793.*
  - *Morbidity and Mortality Chartbook, 1998*
    http://www.nhlbi.nih.gov/resources/docs/cht-book.htm
  - *Fact Book, Fiscal Year 1998*
    http://www.nhlbi.nih.gov/about/factpdf.htm

- Native Hawaiian Health
  http://www.nativehawaiianhealth.net/

- NYU Center for Studies on Asian American Health
  http://www.med.nyu.edu/csaah/research/disease.html

- South Asian Heart Center, El Camino Hospital
  http://www.southasianheartcenter.org/

- **Asian & Pacific Islander American Health Forum**
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