SENATE SELECT COMMITTEE ON ASIAN PACIFIC ISLANDER AFFAIRS
Dr. Richard Pan, Chair

HALTING DEADLY DISEASES AFFLICTING OUR ASIAN PACIFIC ISLANDER COMMUNITIES

UCSF Mission Bay Campus
Genentech Hall – Room N-1114
600 16th St, San Francisco, CA 94158

Monday, October 10, 2016
1:30 PM

BACKGROUND

Purpose

This Senate Select Committee hearing will increase awareness for the Legislature, health care professionals, stakeholders and public about the health disparities among the Asian Pacific Islander (API) population compared to the general population. While cardiovascular disease is the leading cause of death in the United States, cancer is the leading cause of death in the API community with infectious diseases disproportionately triggering higher rates of cancer among APIs, specifically: (1) Hepatitis B virus (HBV) and liver cancer; (2) Human Papilloma virus (HPV) and cervical cancer; and (3) *Heliobacter pylori* bacteria *(H. pylori*) and stomach cancer.

Background

Health *disparities* are differences in the incidence, prevalence, and mortality of a disease and the related adverse health conditions that exist among specific population groups. Groups may be characterized by gender, age, race or ethnicity, education, income, social class, disability, geographic location, or sexual orientation (1).

According to the Health Services Research Community of the National Institutes of Health, health *status* disparities refer to the variation in rates of disease occurrence and disabilities between socioeconomic and/or geographically defined population groups. Health *care* disparities refer to differences in access to or availability of facilities and services. Disparities in both health *status* and health *care* exist in the API population.

The Institute of Medicine (IOM), in a 2002 report titled, "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care," found significant variation in the rates of medical procedures by race, even when insurance status, income, age, and severity of conditions are comparable. This research indicates that U.S. racial and ethnic minorities are less likely to receive even routine medical procedures and experience a lower quality of health services. (2)

The California Office of Statewide Healthcare Planning and Development (OSHPD) reported in 2010 that some members of California's diverse ethnic populations have found it harder to obtain medical insurance and medical care. While many state and federal programs continue to attempt to reduce racial and ethnic disparities in quality of and access to care, significant disparities continue to persist. (3)

Infectious Disease-Cancer Risk Disparities in the API Population

According to the Centers for Disease Control, in 2013 Asian Americans is the first and only U.S. racial/ethnic group to experience cancer as the leading cause of death. (4) Furthermore, as compared to other racial/ethnic groups, Asian Americans experience proportionally higher rates of cancers from infectious origin, particularly tumors of the liver, cervix, stomach, and nasopharynx. (5)

Hepatitis B Virus (HBV) and Liver Cancer

Liver cancer is the third leading cancer among Asian Americans, purportedly because of the relative high incidence of the Hepatitis B virus (HBV). (6,7) Hepatitis B interferes with the liver function and causes organ damage. A small percentage of infected people cannot get rid of the virus and as a result, become chronically infected – these people are at higher risk of death from liver cirrhosis and liver cancer.

Hepatitis B is transmitted when blood, semen, or other body fluid infected with the virus enters the body of a person who is not infected. People can become infected with the virus during activities such as: Birth (spread from an infected mother to her baby during birth), sex with an infected partner, or unsafe injections and transfusions. According to the World Health Organization, HBV is 50 to 100 times more infectious than Human Immunodeficiency Virus (HIV).

Disaggregate data show that Vietnamese men have the highest liver cancer incidence (33.3 cases per 100,000) (8) and the highest liver cancer mortality rate (20.8 per 100,000) (9), as compared to all Asian subgroups. Furthermore, the incidence of liver cancer among Chinese, Filipino, Japanese, Korean, and Vietnamese populations is 1.7 to 11.3 times higher than rates among White Americans. (8) From 2000 to 2004, Asian American men and women were three times more likely to have, and more than twice as likely to die from liver cancer as non-Hispanic/Latino whites. (10)

The higher rates of liver cancer incidence and mortality among Asians overall, particularly among Vietnamese American and Korean American men and women, is likely associated with a higher prevalence of chronic HBV infection. (11) In the U.S., chronic HBV and Hepatitis C virus (HCV) infections are major risk factors for liver cancer and are correlated with increasing trends in liver cancer incidence. (12) Approximately one-half of women who gave birth to HBV-carrier infants in the United States were foreign-born Asian women. (13)

Hepatitis B immunization reduces the incidence of liver cancer, yet historically Asian American youth have reported much lower vaccination levels (26-29%) than other youth (73%). (14-16) It should be noted that HBV reduces the incidence of liver cancer, but does not benefit those already infected.

Human Papilloma Virus (HPV) and Cervical Cancer

According to the World Health Organization, virtually all cervical cancer cases result from genital infection with HPV. (17) When women are exposed to genital HPV, the immune systems usually prevent the virus from doing serious harm, however in a small number of women, the virus can survive for years. Eventually, HPV can lead to the convert normal cervical cells into cancerous cells.

Human papilloma virus can be transmitted via vaginal, anal, or oral sex with an infected individual. Furthermore, HPV is most commonly spread during vaginal or anal sex, and can be passed when an infected person has no signs or symptoms.

Southeast Asian women have higher invasive cervical cancer incidence rates and lower Pap testing/screening frequencies than other ethnic groups in the US. (18) Forty-eight percent of Filipino and 41% of Korean women receive Pap smear tests within the recommended time. (19) Moreover, a large percentage of Vietnamese women are unable to describe the purpose of a Pap test. (20) Among Vietnamese American women, cervical cancer incidence rates are five times that of Caucasian women. (21)

In 2013, Australian researchers report that HPV may be also be associated with some head and neck cancers, with HPV infection tripling the risk of a person developing esophageal squamous cell carcinoma. (22)

According to the Centers for Disease Control, in 2014 HPV immunization rates for women aged 19–26 years for Asians was 22.8%, which was lower as compared with whites (46.3%). (23)

Heliobacter pylori (H. pylori) Bacteria and Stomach Cancer

A stomach bacteria, *H. pylori* is one of the world's most common agents of infection-related cancers. The bacteria exist in approximately 50% of the world's population, is classified as a type 1 carcinogen, typically does not cause symptoms, and is the strongest known risk factor for stomach cancer, which disproportionately affects the Asian community. (24) Complex interactions among bacterial, cellular and environmental factors (i.e., high salt consumption, cigarette smoking) create a precancerous cascade that can lead to stomach cancer. (24)

H. pylori infection typically occurs in childhood, and remains with the individual for their lifetime. While the exact mode of transmission *H. pylori* is not known, it is most commonly spread through saliva, and can also be transmitted through fecal contamination. Personal

hygiene is also very important since food preparers who may not perform adequate hand washing may be potential sources of infection.

Los Angeles County is the most populous county in the U.S. with the largest and most racially/ethnically diverse population. According to the Los Angeles Cancer Surveillance Program (data from 1976 to 2012), stomach cancer among Korean men are particularly high, with intermediate rates for Japanese, Vietnamese, Chinese, Latino whites and blacks, and lowest among non-Latino whites, Filipinos, and Indian/Pakistani/Sri Lankan/Bangladeshi. (25)

There are several tests to detect the presence of *H. pylori* (i.e., breath, blood, fecal, biopsy). (26) In Asian countries (China, Japan, Korea), there are guidelines (2013) for the eradication of *H. pylori.* (27) In contrast, there are no guidelines in the U.S. In addition, no single medication can cure *H. pylori* infections, antibiotics and stomach acid reducing medications can assist.

Disaggregated Data

According to the U.S. Office of Management and Budgets (OMB), "Asian" refers to a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. (29)

U.S. Census 2010 data indicates that the California Asian population is comprised of: (including those with partial Asian ancestry: Filipino (3.9%), Chinese (except Taiwanese; 3.6%), Vietnamese (1.7%), Indians (1.5%), Koreans (1.3%), Japanese (1.1%), Taiwanese (0.2%), Cambodians (0.2%), Hmong (0.2%), Laotians (0.2%), Thai (0.1%), Pakistanis (0.1%), Indonesians (0.1%), Burmese (0.05%), Sri Lankans (0.03%), Bangladeshis (0.03%), Nepalese (0.01%), Malaysians (0.01%), Mongolians (0.1%), Singaporeans (1,513, 0.004%), Okinawans (0.003%), and Bhutanese (0.001%). (30)

The Asian/Pacific Islander population and data are usually combined into a single group. This methodological homogeneity may obscure variations in health status and healthcare utilization across the various Asian/Pacific Islander populations and do not reflect expected differences in language and cultural practices. Disaggregated data will provide greater information and insight about appropriate interventions, as more specifically customized to cultural and biological variables.

Conclusions

Health equity is achieved when every person has the opportunity to "attain his or her full health potential" and no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances." Health inequities are reflected in differences in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment. Achieving health equity, eliminating disparities, and improving the health of all U.S. population groups is one of the goals of *Healthy People 2020*

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