A Provider's Handbook ON CULTURALLY COMPETENT CARE



ASIAN AND PACIFIC ISLANDER POPULATION 2ND EDITION

Kaiser Permanente National Diversity Council and the Kaiser Permanente National Diversity Department



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Asian and Pacific Islander Handbook

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INTRODUCTION

aiser Permanente is committed to improving the quality of care provided to our increasingly diverse membership. Ensuring that members' cultural needs are considered and respected at every point of contact is integral to providing a culturally competent system of care. This commitment is aligned with Kaiser Permanente's mission to provide personalized care and to improve the overall health of the communities we serve.

At the same time, the U.S. population and labor force are becoming more diverse than at any other time in its history. Due primarily to changes in the immigration laws, the country has experienced a major influx of immigrants and refugees over the last decades. The vast majority of these immigrants have come from Asian, Latin and African nations. Added to large pre-existing culturally diverse populations, this makes for an extremely rich and diverse health care consumer market with differing needs and expectations around health care services.

This handbook is the second edition of the Provider's Handbook on Culturally Competent Care: Asian and Pacific Islander Population. For Kaiser Permanente, the term "culturally competent care" is the delivery of health care services that acknowledges and understands cultural diversity in the clinical setting, respects members' health beliefs and practices, and values cross-cultural communication.

Incorporating cultural sensitivity in meeting our current and potential members' needs will be an important strategy in:

- Realizing our mission to improve the health status of the communities we serve
- Enhancing quality of care
- Expanding our markets
- Maximizing retention rates
- Containing costs

This handbook is one in a series of targeted initiatives in Kaiser Permanente's overall strategy to address diversity as a business imperative and a way of maintaining a competitive quality advantage. Our goal in creating this handbook for Kaiser Permanente's health care professionals is to provide an overview of the cultural and epidemiological factors of the major ethnocultural groups comprising our membership. It focuses on the characteristics of each group that affect health care utilization. It does not, by any means, suggest that we stereotype our members by groups. Rather, the handbook presents the cultural information and health care statistics which can help our providers become even more sensitive and knowledgeable about our diverse membership.

The data reported in this handbook come from many articles published in medical and health-related journals, state and federal publications. Data are uneven across the different racial and ethnic groups. For some groups, such as Japanese and Chinese Americans, there is much information. For others, such as Vietnamese and East Indians living in the U.S., information is very scanty. Data sources are placed in the reference section at the end of the handbook, which are organized by topic.

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DEMOGRAPHICS

Introduction

he Asian and Pacific Islander (API) population is the fastest growing group in the United States. Between 1990 and 2000 this population grew 48%, from 6.9 million to 10.2 million persons. Currently, APIs comprise nearly 4% of the U.S. population. Nearly two-thirds of Asian Americans are foreign born, most of whom arrived in the United States since 1965 when changes in the immigration laws eliminated the quota system that was essentially designed to keep people of non-European background from immigrating to this country. Asians make up about one-third of the nearly one million legal immigrants entering this country each year.

Who are Asians and Pacific Islanders? They are, Chinese, Japanese, Koreans, Filipinos, South Asians (Indians, Pakistani, Bangladeshis, Sri Lankans, Nepalese, Burmese), Pacific Islanders (Native Hawaiians, Samoans, Tongans, Tahitians, Guamanians, Fijians, Palauans) and Southeast Asians (Vietnamese, Thai, Cambodians, Laotians, Hmong, Mien) as well as Indonesians and Malaysians. The diversity of cultural groups within the API population makes a full description of some groups very difficult. To further complicate matters, some groups, such as the Indonesians and Afghanis, are of such recent status and are growing so rapidly that accurate information is scarce. According to the 2000 Census, Asians and Pacific Islanders in the U.S. are subgrouped as follows:

- 25.4% are Chinese
- 19.3% are Filipino
- 17.6% are Asian Indian
- 11.7% are Vietnamese
- 8.3% are Japanese
- 4.2% are Pacific Islander

Asians and Pacific Islanders are heavily concentrated in the western United States. More than half (54%) live in the West while 17% live in the South, 18% in the Northeast and 11% in the Midwest.

The history of the major Asian groups in the United States is highly variable. Consider that:

- * The Chinese were the first Asians to immigrate to the United States. They came in sizeable numbers, mostly men, in the mid nineteenth century as a source of cheap labor. Their immigration was sharply curtailed by the Exclusion Act of 1882 and completely eliminated by the 1924 Immigration Act. There are some fourth-, fifth-, and sixth-generation Chinese; but many Chinese came to this country after World War II following the Communist take-over of China, and most immigrated after 1965 when immigration quotas by race were eliminated. Chinese immigration continues at about 61,000 individuals per year (mainland China, Taiwan, Hong Kong.)
- * The Japanese started immigrating to Hawaii in large numbers in the 1880's and the 1890's. Initially, somewhat fewer restrictions were placed on their immigration than for Chinese, but in 1924, they too were forbidden entry. The generations of Japanese immigrants have

distinct names: issei (1st) who were born in Japan and married in the U.S. between 1907 and 1924; nisei (2nd), born in the U.S. between 1910 and 1940; sansei (3rd), born mostly between 1940 and 1965; and yonsei (4th), born in the U.S. after 1965. Unlike the other Asian groups, most Japanese Americans (70%+) were born in the U.S. and are the most assimilated of the Asian populations; with over half married to non-Japanese. Although the Japanese are the third largest Asian group (after the Chinese and Filipinos), few Japanese are currently immigrating to the U.S.

- * Koreans immigrated to the U.S. as early as 1903, many coming to escape the harsh rule of the Japanese. They were subsequently denied entry until after the Korean War, when they were allowed to immigrate in small quotas. In 1965, the quotas were lifted. Thus, most Korean Americans living in the U.S. are immigrants. Immigration continues at about 17,000 individuals per year.
- * Filipinos started to immigrate to Hawaii around 1909 and to the U.S. mainland in 1920. The nearly 100,000 Filipinos who came to the U.S. in this first wave were primarily male agricultural workers who never married or had children. They were considered American nationals because at that time, the Philippines was a territory of the United States. In 1930, a quota of 50 Filipinos per year was imposed, raised to 100 after World War II, and entry was allowed to war brides. The 1965 Immigration Act ended the restrictions. In year 2000, Filipinos numbered 1.8 million, maintaining the position of the second largest Asian group in the U.S. after the Chinese. Most Filipinos in the United States are immigrants and have a high naturalization rate: 73%.
- * South Asians have come to the United States in two waves. At the end of the 1800's and beginning of the 1900's Punjabi farmers came to work in agriculture in California. A small number of middle-class merchants and professionals settled in American coastal cities. However, it wasn't until after World War II that many Indian students came to the U.S. to study science and technology to help with the modernization of India. After the 1965 Immigration Act, thousands of Indians came because they possessed skills that the U.S. economy needed. Currently, Indians are entering the country at a rate of about 40,000 individuals per year, Pakistanis at about 10,000 individuals per year and Bangladeshi at 7,000 individuals per year.
- * Southeast Asians did not immigrate to the United States until after 1975 when most came as refugees to escape communist regimes. The first wave of Southeast Asians were mostly Vietnamese, urban, relatively well-educated and fairly proficient in English. Subsequent waves of Southeast Asians have included Vietnamese, Chinese-Vietnamese, Lao, Hmong and Mien, a majority of whom were poorer refugees. As a result of the atrocities of the Khmer Rouge, over 180,000 Cambodians came to the United States between 1975 and 1987. There are currently about 150,000 Hmong people in the U.S., largely concentrated in Minnesota, California and Wisconsin, who fled from genocide after the Vietnam War due to their CIA sponsored participation in the war against Laos. Immigration from Southeast Asia continues for family reunification at about 55,000 per year.
- * More than 43,000 Samoans reside in the United States, more Samoans than are in American Samoa. Samoa is itself a group 16 islands located 2,200 miles southwest of Hawaii. Seven of the islands constitute American Samoa. Through recruitment into the Navy, a major migration to the United States began in the 1950's and continues today. Most Samoans live in California and Hawaii.

The growth rate of the Asian population is expected to continue to rise. Projections are that by 2020, 6%, or 20 million Americans will be of Asian and Pacific Islander origin. At present, immigration accounts for more than half of the Asian population growth. Asian immigrants tend to become citizens at a high rate: 69%.

Nearly 40% of the nation's 10.2 million Asian Americans live in California, where they make up 12% of the population. However, in Hawaii, Asians comprise 58% of the population. Other states with large Asian populations are Alaska, Nevada, New York, New Jersey, Illinois and Washington. The Metropolitan Areas with the greatest percentages of Asians are: Honolulu-67%, San Francisco-32%, San Jose-28%, San Diego-15%, Seattle-15% and Los Angeles-11%. Distinctive Asian ethnic enclaves have formed in certain metropolitan areas. San Francisco and New York both have long-standing Chinatowns that have been reinvigorated by an influx of new immigrants.

Language

Language is perhaps the most prominent barrier to health care for Asians and Pacific Islanders. According to the 2000 U.S. Census, 66% of Asians and Pacific Islanders speak a language other than English at home. API individuals also have the highest percentage of persons aged five years or older who are classified as linguistically isolated, which is defined by the U.S. Census as having any member of the household over the age of fourteen who speaks English with some difficulty. While interpreters are often employed in health care settings to help mediate language barriers, few possess adequate knowledge and training in medical terminology.

About 38% of Asian Americans do not speak English fluently. The percentage of persons five years or older that do not speak English varies by API group: 61% of Vietnamese, 52% of Korean, 51% of Chinese, 25% of Japanese, 24% of Filipino and 24% of Asian Indians are not fluent in English. A very large proportion of APIs over 65 years of age does not speak English fluently.

Racism

Many Asians and Pacific Islanders experience racism in their everyday lives. Racism can take on many forms. Most discriminatory behaviors are covert. Rather, they consist of preconceived notions that often subtly affect attitudes and behavior towards others. This can lead to a distrust of westerners, which sometimes include health care providers and hinders many Asians and Pacific Islanders from fully utilizing western health care services.

Families

A very small percent, 4.7%, of Asian families are comprised of female-headed families with children. The overall Asian American birthrate is approximately 1.8 births per woman, and this rate decreases with education and acculturation, compared with 2.1 per woman in the general population. A large majority of Asian children, 82%, are living in families with both parents present. Because of immigration, Asian American householders are much younger than householders in the nation as a whole.

Education, Income and Occupation Patterns

Education

The 2000 Census revealed that 44% of APIs over the age of 25 had 4 or more years of college compared with 28% of Whites, 16% of African Americans and 11% of Latinos.

The educational advantage obtained by APIs is even more apparent in the 25 to 29 young adult group:

- 54% of APIs received a bachelor's degree or higher, compared with 29% of Whites, 17% of African Americans and 10% of Latinos.
- While just 5% of all Asians between 18 and 24 had not completed high school, the percentages were 8% for Whites, 16% for Blacks and 36% for Latinos.
- The high levels of education are reflected in the occupations of Asians and Pacific Islanders. More than 7% of the nation's high tech workers are APIs and this figure represents a significant proportion of the nation's best-educated scientists and technicians. Eighty-three percent of all API scientists and engineers are immigrants and most have been educated in the U.S. One-fifth of Asians and Pacific Islanders has either a master's or professional degree and one-fifth have doctorates.

Income

The high educational levels of most Asian Pacific Islander Americans are reflected in the income structure of the group:

- The median household income for Asian families in 2000 was \$55,521, compared to \$45,904 for Whites, \$33,447 for Latinos and \$30,439 for African Americans.
- Per capita income, however, was \$22,352 for Asians and Pacific Islanders, \$25,278 for Whites, \$15,197 for African Americans and \$12,306 for Latinos.
- In 2000, 10% of Asian families, compared with 7% of White, 22% of African American and 21% of Latinos were at poverty level or below.

In relative ranking, Asian Indians are the most affluent of APIs, followed by Japanese and Chinese Americans. Despite the generally high income levels among APIs, certain subgroups such as Cambodians, Laotians, Hmong and Samoans experience poverty levels higher than the national average. These are groups that came from less developed countries or from rural cultures for whom transition to the post-industrial U.S. has been difficult.

Occupation Patterns

• API individuals are a key source of health care professionals. In 2000, they comprised 15% of the nation's physicians and 9% of the nurses. Asian nations are one of the major sources of foreign medical graduates, most of whom come from India, the Philippines, Korea, China, Hong Kong and Taiwan. Asia is also a large source of nurses, about 70% of whom are Filipino. Asians and Pacific Islanders comprise about 25% of all physicians and nurses employed in public hospitals in New York, Los Angeles, San Francisco and Chicago.

- The self-employment rate for APIs is the same as that for Whites: 11%. Eighty-five percent of this group is immigrant, 20% have a graduate or professional degree.
- While about 15% of APIs are in service occupations, just 11% are in skilled, semi-skilled
 and laboring occupations. Most of these latter workers are recent immigrants without
 high school diplomas.
- The growth of working-age Asians and Pacific Islanders will have a great impact on the labor force in the United States. Projections estimate that the working age population of APIs will expand to 9-11 million workers by the year 2020, 71% of whom will be foreignborn. Highly educated Asians and Pacific Islanders have a labor force participation rate of 84%.

Health Care Coverage

Many Asians and Pacific Islanders are fortunate to be in occupations that provide private insurance plans. However, 20% of the API population lacks health insurance while 14% of the total U.S. population is uninsured. This higher proportion of uninsureds in the API population may be the result of the fact that more foreign-born persons in the U.S. (32%) are uninsured than U.S.-born (12%.) When examining health care coverage rates among API subgroups, the coverage rate varies significantly. For example, 34% of Korean Americans do not possess health care coverage, whereas 20% of Chinese Americans have no health care coverage. In addition, API individuals are much less likely to possess Medicaid coverage than Whites. Researchers speculate that this under-utilization may be due to concerns among API immigrants that Medicaid enrollment for themselves or their children may hinder efforts to become U.S. citizens.

Implications for Kaiser Permanente Care Providers

- The term "Asian and Pacific Islander" is an ethnic gloss and aggregates very different cultural groups with very diverse beliefs and epidemiological patterns. It is important that these differences be recognized in treating our members.
- Providers must be sensitive to the feelings of distrust that may exist due to experiences of
 racism in the everyday lives of many API patients. As health care professionals, we
 should assess our own individual stereotypes, biases, and perceptions about Asians and
 Pacific Islanders and determine how they might influence our clinical practice.
- As the API population grows, it is likely that more health care consumers will be Asians and Pacific Islanders.
- The Asian and Pacific Islander population is primarily an immigrant population, and, if current immigration trends continue, we may expect this to be the case for several decades. This implies that the API population will be an acculturating population with beliefs, values and linguistic capabilities variably drawn from their cultures of origin and the U.S. culture.
- We can expect that Asians and Pacific Islanders will continue to swell the ranks of the health care professions. We can look forward to enjoying the richness of background and culture that this will bring. Recruiting and retaining APIs in all areas will enhance our ability to appeal to, and effectively serve a diverse population.

HEALTH BELIEFS AND BEHAVIORS

Introduction

s the Asian and Pacific Islander (API) American population grows in size and visibility in the U.S., APIs are not merely altering the "face of America." They also bring with them different values and health beliefs from their respective home countries and present new ideas and challenges to health care providers as medical encounters with APIs become a daily norm. Culturally competent care emerges as a necessity in ensuring effective and quality health care to this diverse group of Americans.

Since culturally competent care assumes a holistic approach, physical, mental, religious and social factors need to be considered. The challenge to health care providers in treating API patients is to think about and communicate treatment approaches within a culturally considerate framework. This means being sensitive to the ethnic and cultural background of the patient, his/her beliefs about the cause and appropriate treatment of a disease, and his/her health care decision-making processes. Understanding Asian and Pacific Islander health beliefs and behaviors also requires an awareness of social-structural constraints that may contribute to limited access and under-use of health care, language and communication barriers, immigration status and racism.

The API community is made up of various subgroups, each with unique health behaviors and beliefs. While generalizations will be made here about the cultural values and health beliefs within each subgroup, they must be understood as a convenient method of expressing the most prevalent commonalties and obvious features. Rather than treating the text in this section as a "recipe" for understanding Asians and Pacific Islanders, the information should be regarded as a schematic sketch that is helpful in looking at dominant patterns and characteristics of a diverse population. The API subgroups addressed in this handbook are not based on order of importance but on availability of published information. The groups not addressed pose a call to future medical researchers to fill in the missing gaps.

The health beliefs and behaviors of Asians and Pacific Islanders are shaped by, at least, eleven variables:

- Ethnic heritage
- Socioeconomic status (SES)
- Gender
- Sexual orientation
- Age
- Rural or urban origin/regional
- Geo-generational distance the number of generations from the country of origin
- Nation of origin
- · Level of acculturation to Western culture
- English proficiency
- Religious beliefs

While each of the eleven variables may independently affect health care beliefs and behaviors, when taken together their effects interact in complementary ways. Geogenerational distance, place of birth, level of acculturation, and English proficiency are particularly crucial pieces of information as they usually indicate the level of familiarity with

Western culture and its health care systems. For example, when compared to a newly immigrated Chinese, a third generation English-speaking Chinese American is more likely to be familiar with the American health care system, its underlying values and perspectives, and be comfortable seeking Western forms of treatment. Religious beliefs may also affect an APIs understanding and acceptance of Western attitudes toward health. For example, a South Vietnamese immigrant who practices Catholicism is more likely to share Western cultural beliefs, including medical beliefs, than a Vietnamese immigrant who follows the tenets of Buddhism. Understanding the interactions among these variables, a clinician can better appreciate the complexities that arise when studying the different perceptions of health and illness, uses of traditional medical treatments, and health care decision-making processes among Asians and Pacific Islanders. In order to discuss the Asian and Pacific Islander view of health and illness in a manner that is sensitive and respectful of the nuances across the subgroups, the health beliefs of these two groups will be addressed separately in this chapter.

Asian American View of Health and Illness

Here, the views of health and illness among the various Asian subgroups are discussed together, as many share common health beliefs stemming from traditional and sophisticated medical systems developed in India and China. As health beliefs are closely linked to world view, which in turn is shaped by religious orientation, the pervasive influences of Hinduism and Buddhism arising in India, and/or Taoism and Confucianism originating in China, have over the centuries, impacted the health belief systems of almost all Asian cultures. In many cases, these complex orientations overlie and are integrated with naturalistic and animistic concepts in the more rural areas.

Buddhism

Buddhism promotes a spiritual understanding of disease causation. Since life is seen as a constant state of suffering caused by selfish desires and a retribution for wrongdoings in the current life and previous lives, illnesses are believed to be punishments for these transgressions. Sicknesses are fatalistically perceived to be an inevitable part of life. Groups who are influenced by Buddhist beliefs include Chinese, Japanese, Korean, Vietnamese, Laotian, Hmong, Mien, Cambodian, and East Asian Indians.

Confucianism

Confucianism is an ethical belief system which originated in China in the 4th century B.C. with the teachings of the philosopher Confucius. The system, still strongly influential in China, Vietnam and Korea, stresses respect for authority, filial piety, justice, benevolence, fidelity, scholarship and self-development. The Confucian rules for living are focused on producing harmonious and respectful interactions among people. The Confucian "work ethic" emphasizes the virtues of hard work and responsibility. In Confucianism, the body is part of the immortal vehicle of descent linking ancestors to future generations and is to be kept healthy and not abused. The system of yin and yang and bodily harmony had its origins as far back as 2300 B.C. and was elaborated upon by Confucian scholars in the third century B.C.

Ayurveda-Indian Medical System Based on Hindu Philosophy

Ayurvedic (ayur= "longevity,": veda= "science") principles have long governed the health beliefs and behaviors of Indians and do so for many today. Additionally, Ayurvedic medicine has influenced health beliefs in most Asian countries. While India is a society divided by

varying religious and cultural beliefs, and Indians in America, generally speaking, are not grouped in cohesive communities, Ayurveda marks a codified tradition in medicine shared by a nation that is otherwise noted for its diversity. Although regional variations exist and different practices are adopted by the hierarchical caste system in India, there are fundamental principles that define this health tradition. East and Southeast Asians are groups that are influenced by Ayurvedic medicine.

The underlying belief of Ayurveda is the interrelationship between the universe and the body. While the universe is made up of five basic elements: water, fire, earth, wind, and ether (space), three of these elements have a corresponding component in the body. Fire denotes bile, water represents phlegm, and wind signifies breath. The three analogues function as humors of the body or determinants of its physical and mental state. The chief aim is to maintain a balance between the three humors; when this homeostatic condition is reached, one is considered "healthy." Although blood is not considered a humor, it is still regarded as a vital and precious part of the body as its viscosity measures the strengths and weaknesses of the elements. Embedded in this medical tradition is the interconnectedness and oneness of the mind, body, and soul and the belief that one's health incorporates social, environmental, and spiritual aspects that must be kept in balance and harmony.

The maintenance of a proper diet plays a key role in preserving humoral balance. Foods such as chicken, garlic, and cloves are perceived as "hot" and believed to increase the heat of the body, while foods like yogurt, oranges, and rice are seen as "cold" and produce the opposite effect. The addition of spices and specific ways of cooking can also alter the perceived nature of foods. Adding garlic or roasting will transform a "cold" food to "hot." Consistent with Ayurvedic principals, optimal health is obtained through a balanced intake of both "hot" and "cold" foods. The excess consumption of one type of food over another disrupts the homeostasis of the body and produces illnesses.

Taoism

Chinese traditional concepts of health also maintain that good health is achieved through a balance of two dynamically opposing forces. According to Taoism, the universe is composed of two basic forces, the yin and the yang. Whereas yin, the female force, is represented by darkness, softness, and cold, yang, the male force, is represented by light, strength, and heat. The human body, like the universe, is made up of these two forces as different parts of the body denote either a yin or yang force. While yin is generally considered to control the internal, lower, and front portions of the body, yang monitors the external, upper, and back parts. Each force is also believed to dominate half the vital organs. Additionally, the body is believed to contain pathways or meridians that allow for a steady flow of chi or energy. Disease causation is commonly attributed to the obstruction of chi since it disrupts the yin and yang. The practice of acupuncture relies upon knowledge of the body's meridians and the flow of chi.

The traditional Chinese view of the human body as a derivative of the natural world shares correspondences with Ayurvedic principle. The health beliefs of Chinese, Japanese, Korean, Vietnamese, Laotian, Hmong, Mien, and Cambodian are all affected by Taoistic principles. The Filipino concept of health is based on a similar principle of balance, Timbang, that is in accord with Ayurvedic and Chinese traditions. Similar to Ayurvedic medicine, a balanced diet of "hot" and "cold" foods is a pragmatic application of the Timbang system. Specific disorders are perceived to be caused by an excess intake of one type of food. For example, "hot" foods are seen to cause fever blisters, anxiety and acne, whereas "cold" foods can exacerbate menstrual cramps and female reproductive disease. "Cold" foods are commonly

avoided right after the delivery of a baby. Examples of "hot" foods include ginger and sesame oil. Examples of "cold" foods include radishes and ice water.

Naturalistic Theory

Naturalistic theory is another variation of traditional Asian medicine where physical and social factors are integrated to diagnose illnesses among Vietnamese, Laotians, Hmong, Cambodians and Filipinos. Diseases are perceived to be caused by shifts in environmental forces. High winds and rainy weather are believed to result in rheumatism or respiratory diseases.

- Cambodians believe that one's state of equilibrium, which involves a balance of mind, body, and spirit, can be disrupted by an internal "bad wind" that produces illnesses and sufferings. A common manifestation of disequilibrium among the Cambodians is koucharang, or "thinking too much," and is symptomatic of one who experiences profound anger and grief.
- Traditional Filipinos often avoid exposure to overheating and rising vapors from the soil since overheating is believed to cause fevers, while rising vapors produces rheumatism.
- Many Vietnamese, Laotians, Hmong, and Cambodians also try to avoid the consumption of certain foods that are believed to contain "bad winds" and cause physical ailments.

Animism

Animism is the belief that human beings, animals, and inanimate objects all posses souls and spirits. Although spirit worship is one of the oldest religious traditions, the only API groups that still widely adhere to forms of animism are generally from the more rural parts of Asia, which includes, Laotians, Hmong, Mien, and Cambodians.

- Illnesses are normally viewed as punishment from gods, demons, and spirits or seen as curses from evil spirits. To alleviate one's sickness, appeals are often made to gods or shamans who are called upon to chase away evil spirits.
- Since the body is believed to contain many souls, good health is obtained when all the
 souls are present. However, due to a multitude of reasons, souls wander away from the
 body and result in a condition known as "soul loss," which accounts for a number of
 physical and mental illnesses.
- To call back a soul, elaborate ceremonies are held where shamans perform ritualistic practices to welcome back a soul.

Pacific Islander View of Health and Illness

Due to the geographic distance of the Pacific Islands from mainland Asia, the health beliefs and behaviors of Pacific Islanders differ significantly from those of Asians, as they are derived from the various distinct cultures of the Pacific Islands.

Native Hawaiians

Native Hawaiians, like most API groups, take on a holistic view of life. No distinction is made between the psyche and the soma or between the animate and inanimate. The world view of Hawaiians involves oneness, integration, balance, and continuity between the person,

nature, and the spiritual world. The disruption of this equilibrium, pono, results in both physical and mental illnesses. Diseases are also believed to be caused by a loss of energy and power, mana. Three basic values govern the Native Hawaiian world view: (i) ho'omana-spirituality, (ii) lokahi-harmony, and (iii) 'ohana-family.

Samoans

Samoans appear to accommodate two systems of health beliefs in understanding the cause of diseases. While germ theory is used to explain the causation of certain illnesses, other factors such as too much work, too little sleep, exposure to bad weather, consumption of certain foods, and "bad blood" are also believed to result in physical ailments. A study conducted in Hawaii among Samoans showed that the etiology of "serious" diseases is believed to result from interpersonal conflicts between family and friends, failure to carry out social roles, or disobeying of God's laws. These explanations are reflected in the Samoan world view that emphasizes an interconnectedness with one's family and society and the belief that an individual bears the responsibility of his/her behavior. Additionally, there exists the notion that deviant behavior is punished in the form of illnesses.

Traditional Medical Treatments

The use of non-western medicine among Asians and Pacific Islanders ranges from healing rituals, common among Southeast Asians, to the administering of massages, acupuncture, and herbal intake by all API groups. Since Asians and Pacific Islanders often utilize traditional and biomedical health care systems at the same time, health care providers need to be aware of the multiple forms of traditional medicine practiced by the API groups in their specific locale. While being respectful of the role traditional medicine plays, health care providers can explore the ways traditional medicine complements biomedical health care systems and also be aware of the issues that combining medical systems may raise.

Herbal medicine is perhaps the most widely practiced form of traditional medicine among Asians and Pacific Islanders. The intake of herbs to treat illnesses has had a long tradition in both Chinese and native Hawaiian cultures. Herbal shops such as Chinese pharmacies are found in almost all American urban and rural centers that have large Asian populations. Asian herbal medicine has impacted western medicine through ongoing research on the pharmacology and effectiveness of herbs in treating specific diseases. For example, published guides, such as "A Barefoot Doctor's Manual," are currently available and contain information on over 500 useful herbal medicines. The Hawaiian "Materia Medica" has recently received medical attention as researchers explored the usefulness of traditional herbal medicines in treating asthma.

Although herbal medicine has been proven to be effective in treating some illnesses, there are nevertheless reported cases where the intake of herbs is actually toxic to the body.

- Unintentional overdose of Jin Bu Huan, a traditional Chinese herbal product used as a sedative and analgesic, was found to result in a rapid onset of life-threatening bradycardia and acute hepatitis.
- Physicians, often unaware that patients are already taking herbs such as ginseng to treat
 hypertension, prescribe anti-hypertensive medications normally given to clients with no
 other medications. In these cases, a thorough assessment of the patient's medical
 practices may help avoid unintentional effects.

• Physicians need to be aware that recently immigrated Asians and Pacific Islanders may not be familiar with western prescriptions of pills and capsules. Since herbalists normally provide instructions on how to prepare herbs to treat specific symptoms, clients are given a sense of control as they can regulate the concentration of the herbal broths. With western prescriptions, API patients lose this degree of autonomy in managing their illnesses. The lack of proper understanding of western drugs could prompt clients who continue to feel ill after taking western medications to also rely on herbal medicines or attempt to regulate drug effects by increasing dosage.

Almost all Asian subgroups rely on acupuncture for the treatment of illnesses. Rooted in traditional Chinese concepts of health, acupuncture is a sophisticated and codified form of medicine that involves the placement of needles over strategic points of the body. These specific sites are seen as meridians or energy sources that help maintain a homeostatic condition within the body. Pacific Islanders, instead of using acupuncture to channel energy flow back into the body, believe that through massage, one's life essence can be rubbed back in. This is most common among Samoans who depend upon fofos, traditional Samoan healers, or elder members of one's family to administer massages.

The use of traditional medicine among Southeast Asians is deeply rooted in their beliefs about the causes of diseases. Since illnesses are believed to be caused by an imbalance of "hot" and "cold" states in the body, often described as "wind illness," dermabrasive techniques are employed to release the "bad winds" from the body.

- Coin rubbing is a process where the skin, usually the torso or extremities, is first massaged with tiger balm ointment (a eucalyptus-based oil) and then rubbed using the edge of a hot coin. The resulting reddened welts are believed to raise "bad winds" to the skin's surface so that they can be eliminated.
- Pinching is employed to restore the body's equilibrium where pressure is applied by pinching the skin between the thumb and the index finger until contusion results.
- Cupping involves placing a heated cup on the forehead or abdomen and then allowing it
 to cool. The negative pressure or vacuum that results creates circular marks on the skin
 and draws out "bad winds."
- Moxibustion is another form of treatment where incense or other combustible materials
 are used to make small, circular, and superficial burns along the torso, head, or neck
 areas.

Through these various techniques, "bad winds" are believed to be purged out of the body so that it can return to a state of equilibrium. Because these dermabrasive techniques result in forming reddened marks or bruises on the skin, they may be mistaken as child abuse by public school officials and can be puzzling to clinicians when first encountered.

Healing ceremonies are also widely conducted among Southeast Asians to treat illnesses that are believed to be caused by supernatural forces. In cases of "soul loss," soul-calling rituals are performed to entreat wandering souls to return to the body. Such ceremonies are often conducted as preventative measures to reduce the risk of "soul loss." Healing and protective ceremonies are also held, where appeals are made to ancestor spirits, usually by the male head of household, to watch over the health of one's family or to appease evil spirits from cursing them with illnesses. Other ceremonies conducted by priests to treat diseases involve the conjuring up of ancestor spirits or the spirit master of the healer rather than the afflicted.

It is best not to assume that acculturation necessarily leads to a ready abandonment of traditional medicine in favor of western forms of treatment. In a recent study on the use of traditional Korean health care among Korean immigrants in the U.S., results showed that the most educated and assimilated Korean immigrants were more likely to rely on herbalists and acupuncturists to treat illnesses than immigrants who are less assimilated and of lower socioeconomic status. The growing popularity of acupuncture as an effective form of treatment is also evident as many U.S. insurance companies now include acupuncture in their coverage and acupuncturists are licensed in many states. Physicians who treat a large number of Asians and Pacific Islanders, especially if they are drawn from one specific group, would do well to familiarize themselves with the forms of traditional Asian and Pacific Islander medicine in their community.

Health Care Decision-Making Processes

Health care providers should be sensitive to the role played by the Asian family in health care decision-making. Different beliefs about death affect health care decisions among Asians and Pacific Islanders. Decision-making processes among Asians and Pacific Islanders can be guided by several notable features:

- In almost all API groups the eldest male acts as the head of household and assumes the position of primary decision maker. The only exception would be in the Hmong society, which is more egalitarian. Decision-making, including important health care decisions, normally involves many members of the family, particularly elders.
- Although males take on the dominant role in a family, studies have shown that within a
 Cambodian family the daily health care decisions pertaining to children are made almost
 exclusively by mothers.
- Unlike western culture, which values individual autonomy, Asian and Pacific Islander
 cultures emphasize the importance of community and family. Individuals are often
 expected to sacrifice personal needs for the good of the group and in decision-making
 may weigh these factors in ways not always clear to health care providers.
- Due to the pervasive influence of Buddhist teachings, Asians may take a passive approach in the treatment of diseases. Since illnesses are believed to be an inevitable part of life and retributions for past transgressions, many Asians endure a great deal of physical pain before deciding to seek treatment or respite.

Of special interest are the effects of culture on life-support decisions among Asians. In the last 50 years, the west has considered the adult patient to be the primary decision maker in most health care related issues, with the right to receive a full disclosure of his/her health status. While within a western framework, these beliefs are considered the most ethical choices, they nevertheless do conflict with the ethical values of many Asian cultures.

- Often when the patient is an Asian woman, the eldest male in the family and not the patient is the primary decision maker.
- The "telling of bad news" to the patient may be avoided by the family, as the mention of
 death or a terminal condition can be seen as a curse that only speeds up the process of
 death.

- A Do Not Resuscitate (DNR) goes against the value of longevity and may offend an Asian
 patient's children since filial piety dictates that they do whatever it takes to sustain the life
 of the parent.
- For some Asian patients it is important to die at home, rather than in a hospital. A
 referral to a hospice program may help in resolving these issues.
- Conflicts have emerged as doctors attempt to obtain consent for surgery from Southeast Asian patients. Since surgery is believed to result in "soul loss" and a disruption of the body's homeostatic state due to the excess loss of blood, many Southeast Asians shun this form of treatment. This creates problems for western physicians who consider surgery the best and sometimes the only form of treatment for specific ailments. Physicians may want to work with traditional healers, clergy, and family in assuring patients that surgery won't result in "soul loss" and to explain that the blood can be replenished after the surgery.

Implications for Kaiser Permanente Care Providers

- Unfamiliarity with western health care systems among Asians and Pacific Islanders and lack of culturally-sensitive care in the United States contribute to under-use of western medical treatments among the API community. As medical encounters with Asians and Pacific Islanders become more frequent in our health care settings, health care professionals become more familiar with the beliefs and behavior of this population.
- Understanding how the various Asian and Pacific Islander world views shape beliefs
 about the causes of disease and health decision-making processes is critical to providing
 quality care. Beliefs in the interconnectedness of the mind, body and spirit, and the need
 for balance require a more holistic approach to treatment.
- Western forms of treatment complement the traditional medical practices of Asians and Pacific Islanders. Providers may wish to consult traditional healers or support the patient's choice to do so, in addition to prescribing western forms of treatment.
- Paying close attention to the patient's age, geo-generational distance, and language
 proficiency, providers may help gauge the patient's familiarity with western health beliefs
 and adherence to traditional concepts.
- With recent immigrants, assess familiarity with western prescriptions of pills and capsules
 and emphasize importance of treatment compliance. The lack of proper understanding of
 western drugs could prompt patients who continue to feel ill after taking western
 medications to rely on herbal medicines alone or attempt to regulate drug effects by
 increasing dosage.
- Arrange for an interpreter when the patient or family spokesperson is limited-or non-English proficient.
- Utilize medical terminology glossaries with illustrated anatomical features which are available in most Asian languages and can be useful tools to providers.

A significant percentage of Asians and Pacific Islanders is influenced by health belief systems that differ from western concepts of health and certain culturally-based health beliefs.

- Some individuals from Asian subgroups influenced by Ayurvedic and Taoist principles are reluctant to donate blood because a loss of blood disrupts the humoral balance within the body. They also may fear surgery because it may result in an excess loss of blood.
- Some Southeast Asians are reluctant to undergo surgery since the opening of the body
 may lead to "soul loss." Surgery also makes the body more susceptible to the entrance of
 "bad wind" that threatens to alter the homeostasis of the body. Rural Filipinos who are
 influenced by naturalistic theory shun any exposure of bodily orifices for fear that
 undesired winds might enter the body.
- In the mind body association, it is believed that mind is embodied in the physical, and that mental problems are manifested in physical symptoms. Additionally, in Chinese history, the scholar-bureaucrats used physical manifestations of illness, especially chronic illness, as an excuse for withdrawing from public life, either temporarily or permanently, thus giving somatic symptoms of mental or even social problems authoritative credibility.
- Ask the patient to whom they want medical information communicated. Among some groups, the patient's hearing of bad news is believed to speed up the process of death.
- Assess use of traditional medicines and their contraindications with western medicines. For example, an unintentional overdose of Jin Bu Huan, a traditional Chinese herb used as a sedative, may cause life-threatening bradychardia and acute hepatitis.
- Practices as coining and cupping may produce reddened welts or marks on the skin and may be mistaken as self-abuse or child abuse.

RISK FACTORS

Before reviewing epidemiological patterns among Asians and Pacific Islanders, it will be useful to consider modifiable risk factors that affect the health of these populations. These factors include diet and nutrition, obesity and the use of tobacco, alcohol and drugs. There are also social and economic risk factors that are not easily modifiable, but impact health care delivery.

DIET AND NUTRITION

Introduction

Understanding the diet and nutrition of many Asians and Pacific Islanders involves examining traditional diets as well as the effects of westernization in altering previous patterns of food consumption. In addition, the cultural significance of certain foods requires special attention since food is not always valued by the API community solely for its nutritional content. Rather, food plays an essential part in maintaining ethnic identity, provides symbolic meaning to various ceremonial and social functions and is believed to treat and prevent certain diseases. Due to the influences of Ayurvedic and Chinese traditional medicines, foods are perceived as "cold" or "hot" and believed to either calm the body or heat it up. Optimal health is achieved through a balanced diet of "cold" and "hot" foods. As health care

providers seek to recommend a diet that is culturally relevant, it would be useful for them to explore ways in which a western diet can complement traditional API diets. To ensure optimal health for the API community, health care professionals need to be sensitive to the varied role food plays in the lives of Asians and Pacific Islanders.

Traditional Diets

East Asians and Southeast Asians

The dietary characteristics of Chinese, Japanese, Koreans, Vietnamese, Laotians, Hmong, and Cambodians are similar, though there are specific underlying differences related to the country of origin. Rice is the predominant carbohydrate staple, while fish and shellfish, and meat, are the main sources of protein. When eating animal meat such as chicken, pork, and beef, almost every part of the animal is used for food. Other commonly consumed foods include soybeans, pickled vegetables, noodle soup, and a wide variety of vegetables, fruits, and seafood. Foods, which are generally fried, steamed, and boiled, are prepared with an eclectic mix of spices and sauces.

Indians

Many Indians, but not all, are vegetarians. This dietary characteristic is rooted in the beliefs of Hinduism. Perhaps the most notable feature of Indian food is the use of spices such as tarragon, cumin, fenugreek, tumeric, cloves and cinnamon, mixtures of which are commonly called curries.

Filipinos

Rice is the primary staple of the Filipino diet, while various fish and vegetables are commonly eaten. Additionally, Filipinos, unlike East Asians, Southeast Asians and Indians, consume more animal meat and fat. Although many Filipino foods are influenced by both the Spanish and Chinese cultures, foods such as Adobo chicken and pork, Pancit noodles, Nilaga soup and Sinigang, a tamarind seasoned dish, are distinctly Filipino dishes.

Samoans and Native Hawaiians

The diet of Samoans and Native Hawaiians before the onset of Western influence consisted mainly of taro, breadfruit, yams, fruits and fish as staples. Samoans also consume large portions of coconuts and coconut creams. Foods are generally eaten raw or steamed.

Strengths of Traditional Diets

Some Asian diets are:

- Low in saturated and unsaturated fats.
- High in complex carbohydrates.
- Inclusive of a wide range of fruits and vegetables.

Weaknesses of Traditional Diets

 Absence of dairy products is believed to result in a low intake of calcium among Asians and Pacific Islander Americans.

- Consumption of foods high in sodium such as soy and fish sauces and cured fish may increase the risk of hypertension among some individuals.
- Pickled, smoked, and salted foods containing nitrates increases the risk of stomach cancer.
- Indians often cook with ghee, a type of butter, and fry many foods.

Effects of Westernization on Health

The integration or adoption of western dietary habits has been shown to negatively affect the overall health status of Asians and Pacific Islanders. As Asians and Pacific Islanders become increasingly acculturated in the United States, they begin integrating western dietary habits with traditional patterns of food consumption.

- Filipinos, Samoans and Native Hawaiians consume diets higher in animal fat, leading to a higher prevalence of coronary heart disease than most Asian groups.
- Animal meat and fat generally replace fish as the primary sources of protein.
- Diets high in simple carbohydrates replace traditional diets high in complex carbohydrates.

The alteration in diet has placed Asians and Pacific Islanders at a higher risk than their respective Asian counterparts to diseases attributed to dietary factors. Such diseases include:

- Coronary heart disease.
- Colorectal cancer.
- Stroke.
- Non insulin-dependent diabetes mellitus.
- Arteriosclerosis.

As Asians and Pacific Islanders acculturate within U.S. society, they tend to decrease their total physical activity and fitness. This places Asians and Pacific Islanders at a higher risk for diseases that can be prevented by regular physical activity.

In looking at the effects westernization has on the dietary habits and patterns of physical activity among the API community, one must pay special attention to several factors:

- Level of acculturation and geo-generational distance number of generations from the country of origin.
- Place of residence Asians and Pacific Islanders living in or near ethnic enclaves have a
 greater accessibility to ethnic foods than those living in predominantly White
 neighborhoods.
- Age and gender.

Additionally, the detrimental effects the western diet has on the health status of Asians and Pacific Islanders present challenges to health care providers. Adoption of the western diet presents grave implications for many Asian nations already influenced by western dietary

habits imported to their countries by western fast-food chains and the increased consumption of meat in these nations.

Obesity

The groups most detrimentally affected by the influences of westernization are Samoans and Native Hawaiians. Currently Samoans and Native Hawaiians are among the most overweight population in the world.

In research conducted among the Samoan American population over a 13-year period, 1978-1991, dramatic increases in the prevalence of obesity and non insulin-dependent diabetes mellitus were reported. The mean Body Mass Index (BMI) for Samoan women, according to one study, is 29.7 while the accepted normal BMI distribution is between 20 and 25. The high prevalence of obesity among the Samoan population has instigated a search for a hypothesized "thrifty gene" believed to account for a genetic predisposition of Samoans and other Polynesian populations to metabolize and store energy with maximum efficiency - a predisposition that becomes problematic with a rich fat western diet.

In research conducted by Molokai Heart Study, 64.5% of native Hawaiians were overweight. Thirty-five percent were reported to be 45% or more above average body mass index for Whites. According to the 2000 Hawaii Behavioral Risk Factor Surveillance System, the prevalence rate of overweight and obese among Native Hawaiians was 1.3 times greater than the overall prevalence rate for the state of Hawaii. Based on self-reported weight, 60% of all men and 40% of all women in Hawaii were overweight and obese. The overall overweight and obese prevalence of both sexes in Hawaii was 50%. Overall rate among Native Hawaiians were 69%.

The high prevalence of obesity among Pacific Islanders places them at risk for diseases where obesity is an established risk factor, including:

- Cardiovascular disease.
- Diabetes mellitus type II.
- Gallbladder disease.
- Some forms of cancer.

Factors contributing to the prevalence of obesity are associated with urbanization and changing lifestyles, which include stress, poor quality diet, increased consumption of alcohol and decreased activity. It is inaccurate to assume that obesity is a cultural norm and that the social acceptability among people who are overweight is a contributing factor to obesity among Samoans and Native Hawaiians. On the contrary, early explorers documented Native Hawaiians, Samoans, and other Polynesian populations as "middle size" and "well made." Prior to the effects of westernization, Pacific Islander Americans were apparently not overweight populations.

While obesity is prevalent among the Pacific Islander population, it is not common among most Asians, East Asian Indians, and Southeast Asians. Additionally, despite the higher consumption of animal fat in the Filipino diet, most Filipinos are not at risk for obesity. Some groups are generally underweight, for example, Southeast Asian refugees, who are likely to suffer from malnutrition. Refugees fleeing from war-torn nations have generally endured long

periods of starvation. Many also lived for years in refugee camps before coming to the United States and consumed nutritionally inferior diets. In dealing with the Southeast Asian population, special attention needs to be given to their nutritional status.

Implications for Kaiser Permanente Care Providers

- Research has shown that western diets have negatively affected the overall health status
 of Asians and Pacific Islanders. Providers may wish to encourage Asians and Pacific
 Islanders to retain the positive elements of their traditional diets and urge more
 consumption of fruits and vegetables commonly eaten by Asians and Pacific Islanders.
- Become familiar with the various foods consumed by Asians and Pacific Islanders and the nutritional content of these foods. Providers may want to consult published guides that offer this specific information.
- Encourage the use of vegetable and corn oil instead of animal fat and sesame oil when stir-frying. Suggest that, when using pork and pork bones to make soup, the fat of the soup is skimmed off the top.
- Recommend the use of "seasonings" such as ginger, garlic, and scallions when cooking instead of high-sodium condiments such as soy sauces, oyster sauce, and bean paste.
- Advise patients about the risks associated with nitrates in pickled, smoked and salted foods. Explain the link between stomach cancer and nasopharyngeal cancer and foods containing nitrates. (See Major Diseases – Cancer)

Substance Use

Tobacco Use

Nowhere is the tendency to aggregate epidemiological data relating to Asian and Pacific Islander populations into a single category "Asian" or worse, "Other," more egregious than in the area of use of tobacco, alcohol and illicit drugs. Nevertheless, most national surveys and some state studies continue to treat Asian populations in this way, primarily because the Asian subgroups are small.

The Behavioral Risk Factor Surveillance System surveys show that Asians and Pacific Islanders, compared to Whites, African Americans and Latinos, report the lowest use of tobacco in any form (cigarettes, pipes, cigars and smokeless.)

The 1997 National Health Interview Survey shows the following percentages of male and female cigarette smokers.

	Male	Female
White	27%	23%
African American	32%	22%
Latino	26%	14%
Asian and Pacific Islander	21%	12%

When the Asian category is broken down into constituent groups, a very different picture emerges. The 1997 Centers for Disease Report on the Health Status of Asian Americans

showed that smoking among Asian groups showed great variability, with Korean Americans having the highest proportion of current smokers, 22%, followed by Japanese, 19%, Filipino, 17%, Vietnamese, 13% and Chinese, 10%, after adjusting for age.

A tendency to lump both male and female statistics further obscures important prevalence information. A Seattle survey of recent immigrants reported smoking rates for three male groups Laotians, 51%, Vietnamese, 42%, Cambodian, 33% compared with 25.5% for White males. A California survey conducted in 1989, showed higher figures for Southeast Asian men: 65% for Vietnamese, 71% for Cambodians and 92% for Laotians. The high rates of smoking among Southeast Asian groups is a male only phenomenon: less than 10% of women in all three groups report current smoking.

In all Asian groups except the Japanese, smoking is three to four times more prevalent among males compared to females. Further, acculturation to U.S. society and increased education appear to affect smoking patterns among men and women in opposite ways. Males, many of whom come from nations with higher smoking rates than in the U.S. reduce their smoking, but with acculturation and education, more Asian women tend to smoke. These trends suggest a tendency to move toward U.S. means.

The use of smokeless tobacco, both by itself and in combination with betel quid, is very common in some Asian populations, notably Indian, Pakistani and Bangladeshi. It is in fact the preferred method of using tobacco among women in these groups. Studies conducted in Great Britain and Canada report significant use of tobacco quid among immigrants.

Although an estimated 15% to 25% of the world's population chews betel quid, the practice has been virtually unknown in the United States. Clinicians report a high prevalence of use among older Cambodian women living in San Diego, Seattle, Long Beach and Minneapolis. Inexpensive ingredients for the quid are commonly sold in Asian markets. Betel quid use is easy to detect because it discolors the teeth. The color ranges from red to black, depending on the preparation and years of use. The quid is prepared by placing a section of areca palm nut on a betel leaf spread with lime paste (calcium hydroxide). In South Asia and Oceania decorative tools, spices and condiments are used for the preparation of betel quid. The discoloration of the teeth is considered cosmetic in some areas, and the practice is also considered healthy for the teeth. Women begin the practice after the birth of their first child, and continue its use socially with other women. Most young women raised in the U.S. are not adopting regular use of betel quid.

The lime that is part of the betel quid hydrolyzes the alkaloid of the nut into arecaidine, a central nervous system stimulant that, in combination with the essential oil of the betel leaf, accounts for the mildly euphoric and addictive properties of the betel quid. Asians chew betel quid to enhance social interaction, relieve boredom and tiredness and increase work productivity. Long term use is associated with asthma, submucous fibrosis, leukoplakia and oral squamous cell carcinoma.

Since both tobacco quid and betel quid are associated with malignancy of the oral mucosa, health care professionals who care for persons from these nations may wish to determine the extent of this practice and give appropriate education. Further, health care assessments might include questions on smokeless tobacco and betel quid use.

Asian Youth

Numerous studies of youthful smoking show that API youth overall are less likely to smoke than young people in other groups and report that their friends do not smoke. Early initiation of cigarette use is not characteristic of Asian youth. For example, a study of urban fifth graders reported in 1990 showed that:

• Just 13% of API boys and 5% of API girls had ever tried smoking, compared with White boys, 27% and girls, 18%.

Almost every national and regional youth survey, using the category "Asian," shows the same relative pattern with Asian youth always the least likely to smoke.

However, as with adults, there may be variability across Asian groups. In the only available study of Vietnamese youngsters, researchers in Massachusetts found that:

- Middle and high school level Vietnamese boys had the same smoking prevalence as White boys, 28%, though they began smoking slightly later.
- By the time they were high school seniors, Vietnamese boys exceeded the smoking rates of all other male groups in the study at 38%.
- Vietnamese girls were very much less likely to smoke, just 4% overall and 6% in the oldest age group (compared with White girls at 30% overall and 38% in the oldest group.)

Alcohol Use

Each Asian culture has a long and unique pattern of alcohol use. Since so many Asians living in the U.S. are recent adult immigrants and were socialized into the drinking norms of their societies, it is useful to consider the patterns of alcohol use in their countries of origin. These patterns, interacting with U.S. drinking patterns, give rise to the practices of Asian Americans.

Chinese

In China, references to alcohol consumption go back to 1850 B.C. The Chinese have had a philosophy of moderation toward alcohol use, informed by Confucian perspectives. Drinking occurs primarily on occasions of conviviality and festivity during which food is also consumed.

- The Chinese, in the main, do not have alcohol-centered social institutions wherein drinking is the major focus of activity.
- Historically, alcohol use in China has been primarily limited to men.

In recent years, increases in the prevalence of alcohol abuse and dependence have been documented in Taiwan, but little information is available on alcohol use/abuse in the Peoples' Republic of China.

Japanese

The Japanese have had alcoholic beverages, primarily sake, for centuries. Shintoism and Buddhism were generally tolerant of drinking in moderation and provided clear rules for drinking by age, sex, social role and occasion. Current Japanese drinking patterns are

complex and more alcohol-focused, though also mostly restricted to men. Banshaku, drinking in the home after work, has long been practiced by Japanese men. Two more recent patterns, drinking after meetings and conferences, and drinking with close friends and associates after work are post-World War II phenomena. As with other aspects of Japanese life, fine distinctions are made relative to rationale for drinking: ian-kai is party drinking, setsutai is drinking to obtain favors, tsukiai is informal, gossip and confidences drinking.

- Drinking among Japanese men is seen to serve several purposes: it eases social bonding, facilitates communication in a highly stratified society and serves as a vehicle to vent problems.
- Historically, male drunkenness was not looked upon as poor behavior, but was positively
 valued and often feigned as evidence of the drinker's humanness and willingness to enter
 into the spirit of the occasion.

In contrast with China, drinking has become institutionalized as a specific alcohol-centered activity. In Japan, women were generally excluded from drinking activities. Recent research in Japan, with samples from rural and urban areas, reported 45% of women to be abstainers compared with 9.4% of men, while 32% of men are heavy drinkers (consumed 3 or more drinks on at least 2 days in the last two weeks) compared with only 4% of women.

Korean

Alcohol use has deep roots in Korean culture and relatively heavy alcohol consumption among males is considered the norm. Alcohol use is romanticized and positively valued for its role in breaking down social barriers, facilitating male bonding and enhancing business relations. Heavy drinkers are labeled choo-dang or choo-ho, words which have positive connotations of joviality and friendliness. Given this positive evaluation, it isn't surprising to find that research has shown that Korean men drink more frequently and heavily than other Asian men.

- Current rates of alcoholism among Korean males range from 22% to 66% lifetime prevalence, depending on the method of assessment.
- Most assessment tools were developed and normed on U.S. populations and at least one study has shown that Koreans themselves label as "alcoholic" only persons who demonstrate physiological symptoms of alcohol use.

Southeast Asian

The use of alcohol is well accepted by Laotians, Cambodians and Vietnamese. Many traditional medicines are alcohol based and are taken to give energy (gelatin from tiger bones dissolved in alcohol) or to relieve pain (opium in alcohol). Alcohol was used traditionally, boiled with herbs, for a period of time following childbirth to "cleanse the blood."

Westermeyer has described the traditional use of alcohol in Hmong society:

- The traditional drink is a home-distilled corn whiskey. Everyone is expected to drink
 together at certain social events, and while intoxication is frequent for men, norms for
 drinking are clear and well-observed. Problem drinking or alcohol abuse are not
 recognized.
- Social drinking is done in groups on special occasions.

As Hmong villagers joined modernized Laotian and Thai society in town life and wage labor, problems related to drunken driving and lost work hours emerged. Communal drinking disappeared in large and socially stratified towns. These same problems limit Hmong communal drinking in the United States, where there is a higher level of abstinence and greater amount of age group drinking among young males than occurred in highland Laos. In the United States, alcohol has begun to supplant opium for medicinal and recreational purposes.

Indian

Drinking patterns in India and in Micronesia and Melanesia are not well reported. Alcohol consumption in India is closely linked to religion and the caste system. While Islam proscribes the use of alcohol altogether, Hinduism dictates its use according to caste: Brahmins do not drink alcohol or eat meat; however, the warrior, merchant and artisan castes may do so, as may untouchables. While the caste system was officially abandoned in the 1950's, and is certainly not part of the cultural milieu in the U.S., Indian social life is still guided by its sanctions because they are embedded in religious thought.

Finally, much has been written about the flushing reaction or vasodilation upon consumption of alcohol that is experienced by many Asians. Research has also demonstrated that many Asians vary from Caucasians in the manner and rate that they metabolize alcohol. However, these differences are highly variable across Asian individuals. It has been hypothesized by some that these physiological factors serve as an aversive mechanism and so protect Asians from becoming alcoholics. Studies that have examined this hypothesis in samples of Asian abstainers and drinkers do not find support for it as many Asian drinkers continue to consume alcohol despite the flush. Social norms appear to have a much stronger influence on drinking behavior.

Alcohol Use in the United States

While national surveys of drinking show APIs to have a low proportion of drinkers compared to other groups, none give a clear picture of variance across Asian groups and none make clear differences by gender. Judging by the drinking patterns in the countries of origin, variance by group and gender in the United States might be expected.

Two major studies, both conducted in California, give information on the comparative drinking patterns of Asian groups. They are shown in the table below.

The researchers who conducted the Los Angeles study point out that most of the Asians in their sample, with the exception of the Japanese, were born outside the U.S.

At Kaiser Permanente, Klatsky and his colleagues studied inter-ethnic differences in alcohol consumption in northern California between 1978 and 1980. They found that Asians and Pacific Islanders reported less drinking than members from other groups. The inter-ethnic differences followed the same pattern as the later Los Angeles study, with Japanese Americans, both men and women, reporting the most alcohol use, and Chinese Americans the least.

The research indicates that immigrant men from heavy drinking cultures such as Japan and Korea tend to reduce their drinking upon coming to the U.S. Few women, on the other hand, who drank much in their native countries, tend to adopt moderate drinking patterns as they acculturate to the U.S. lifestyle.

Illicit Drug Use

Again, since so many Asian immigrants to the United States are adult immigrants, consideration of the background for drug use in Asian nations is appropriate context for understanding differences in how drugs may be perceived and used by Asians in the United States.

Most Asian nations have had a history of the use of plant products (e.g., cannabis, opium and betel) for over five millennia. These drugs in their various forms have played a role in the daily and religious life of many cultures. In India, for example, bhang (infusion of cannabis) and thandai are offered at weddings and social occasions. Bhang is consumed very much like beer. The god Shiva was said to have a fondness for cannabis and thus, Shiva ceremonials include use of the drug in its mild forms. For members of the Brahmin caste, cannabis is not proscribed as is alcohol, because of the role cannabis plays in aiding the contemplation and introspection expected of members of this group. Cannabis is prepared in many forms and dosages and is consumed through several routes of administration: teas, smoking and chewing. The milder forms are taken in the evenings and on holidays as a means of facilitating relaxation. The stronger forms, such as hashish/charas, oil of hashish and ganja, are usually smoked and are not condoned by most Hindu groups.

Both the Hmong and Mien, highland Southeast Asians who immigrated to the U.S. following the Vietnam War, grew opium poppies as their major cash crop. Crude opium, which contains both morphine and codeine, has been used medicinally and as a mood alterer for many centuries throughout Asia. It is used extensively as a cough suppressant, analgesic and for the treatment of diarrhea. For medicinal uses it is commonly mixed with alcohol or other herbal infusions and ingested. In its centuries-old role as a mood alterer, it is smoked or sniffed which allows much more rapid and complete absorption of the psychoactive ingredients. In recent years, injection has been added as a route of administration. As with cannabis, sanctions have traditionally focused on dose level and route of administration, rather than the substance itself.

Drug Use in the United States

Most national drug use surveillance data do not report API use of various illicit drugs by subgroups. In these surveys, APIs report the lowest use rates for all drugs. Several studies point out that drug use is lower among Asian youth than other youth because these young people have fewer psychosocial risks for substance abuse. On the other hand, research in New York and California has shown that, except for alcohol use, use of drugs (e.g., marijuana, pills, amphetamines, heroin and cocaine) among Asian youth was similar to that of Whites and higher than that of Black youth. Overall, the studies that do not focus on specific Asian subgroups yield inconclusive and somewhat contradictory information.

Among Southeast Asians, particularly Hmong and Mien, a return to opium use has been noted. Opium use was not as evident in these populations for about a ten year period after the groups began to immigrate to this country, but means of supply have now been established and areas of high population concentrations (e.g., Minneapolis, Seattle and Oakland.) These areas have seen an increase in admissions for opium addiction. However, the amount of opium dependence among these populations in the U.S. is relatively small, compared to the estimated 9% to 12% prevalence in poppy-producing villages in Laos and Thailand. Chemical dependency treatment providers working with Southeast Asians note that many of the shared assumptions, attitudes and values underlying addiction treatment in the United States were not present in the immigrant culture, requiring revision of treatment principles and procedures on the part of the providers. It has been hypothesized by

Westermeyer, who has treated opium addicts in both the United States and Laos, that use of opium for recreational and medicinal purposes has often been replaced by alcohol in this country.

Social and Economic Risk Factors

Asians and Pacific Islanders encounter various social-structural constraints that can lead to limited access and under-use of health care facilities.

Language

- In 1974 the U.S. Supreme Court established through the landmark case, Lau vs. Nichols, that tacit in Title VI of the 1964 Civil Rights Act, which prohibits discrimination on the basis of race, color, and national origin, was a prohibition of discrimination on the basis of language as well. While this legal mandate stipulates that all health care facilities provide language assistance, the failure to ensure effective and consistent enforcement of this law on both state and national level has contributed to the restrictions of health care access for some Asians and Pacific Islanders.
- Apart from differences in spoken language, problems also arise due to differences in the
 usage of the English language. While many Filipinos and East Asian Indians speak English
 fluently before coming to the U.S., they nevertheless use expressions that may not be
 understood by the average American and may also be puzzled by some American idioms
 or phraseology.
- Similarly, differences in non-verbal communication can also create potential conflicts for health care providers. For instance, crossing one's leg and pointing one's feet in the direction of the patient are considered offensive gestures by most Southeast Asians. Unfortunately, this is a comfortable position assumed by physicians holding a chart on their laps and speaking over it to the patient.
- Difficulties in communicating with the various Asian subgroups can also result from the
 deferential and compliant attitudes that many Asians assume when talking with health
 care providers. Physicians are generally seen as authority figures; thus, many Asians
 refrain from asking questions and will pretend to understand what physicians say even
 when they do not.

Economic/Immigration Status

- While certain groups such as the Chinese, Japanese, Korean and Indians generally earn
 middle class incomes, a significant portion of other groups such as Southeast Asians,
 Native Hawaiians and Samoans are found in the lower socioeconomic levels of the U.S.
- Groups that are well off often mask the needs of more impoverished groups and
 contribute to a lack of recognition that socioeconomic factors have significant impact on
 the limited access to health care among some members of the API community.
- Since many Southeast Asians and Pacific Islanders come from rural parts of Asia and the
 Pacific Islands, they are often not as familiar with the economic system of America.
 Persons from cultures distinctly different from industrial societies encounter great
 difficulties dealing with America's labor market and tend to have high poverty and
 unemployment rates.

- The entrance of Southeast Asians as political refugees also help explain the high poverty
 and unemployment rates among these Asian subgroups. Additionally, many Pacific
 Islanders come from colonized nations where indigenous populations are generally the
 most impoverished groups.
- Fear of deportation and concerns over jeopardizing one's chance of obtaining citizenship
 or permanent residency can act as obstacles hindering Asians and Pacific Islanders from
 seeking health care. Many recent immigrants and refugees confused about eligibility for
 services are also reluctant to visit western physicians.

Implications for Kaiser Permanente Care Providers

- Asian populations have long traditions of alcohol and drug use and possibly different
 perceptions about the harm/benefits of using these substances. Tobacco use appears to
 be high in several Asian groups, especially among males. There is clearly a significant
 gender difference in the use of tobacco, alcohol and drugs among Asians.
- Variation in substance use is great across Asian groups; so health care professionals
 cannot assume prevalence or level of use based on national aggregate statistics; ethnic
 group, immigration status, age and gender all must be considered.
- Use of substances that were previously unknown or rare in the U.S., such as betel quid
 and opium, may be present in some Asian groups. Clinicians can familiarize themselves
 with the signs, sequelae and cultural attitudes surrounding the use of these substances.
- Norms and understanding of risk among Asian immigrant patients may not reflect those
 of the U.S. population, so the clinician may want to hold discussions with immigrant
 patients in order to get a fuller understanding of how the patient regards tobacco, alcohol
 and drug use.
- Full and explicit education around the risks associated with the use of various substances may be helpful for the patient.

MAJOR DISEASES

Introduction

In addition to ethnicity, age, and gender, generational distance or the number of generations from place of origin plays a significant role in the prevalence of disease among Asians and Pacific Islanders. By comparing, for example, the prevalence of gastric cancer in second-generation Korean Americans with that of first-generation Korean immigrants, the larger White population, and Koreans in Korea, the effects of acculturation as well as dietary, environmental, and hereditary influences can be analyzed. Although not every study on the major diseases confronting Asians and Pacific Islanders offer data for this comparative approach, an awareness of the interplay between these factors can assist clinicians in understanding the health status of the API community.

Research Constraints

Asians and Pacific Islanders are generally perceived to possess good health because prevalence for most major diseases is lower than that of Whites and other ethnic minorities. While these findings have generated a considerable amount of attention to various dietary, environmental, and genetic factors that contribute favorably to the overall health status of Asians and Pacific Islanders, the perception of Asians and Pacific Islanders as "models" of good health is problematic. Such representation assumes a homogenous API community and fails to recognize its diversity.

Lack of reliable national API data results in an unevenness of in-depth epidemiological surveys of the multiple API subgroups. A disproportionate amount of epidemiological studies focus on Japanese Americans while other API groups such as Koreans, Filipinos, East Asian Indians, and Southeast Asians receive little attention. Many studies of API are also area and regionally based, rather than national in scope, and will be so noted in the discussion. The limited amount of available materials on the health status of Asians and Pacific Islanders presents serious challenges to health care providers as daily encounters with the API community increase.

Diabetes Mellitus

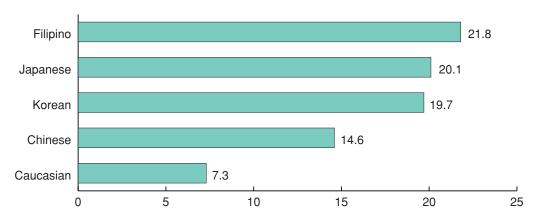
Non insulin-dependent diabetes mellitus (NIDDM) or type II diabetes is high among Asians and Pacific Islanders while insulin-dependent diabetes mellitus (IDDM) or type I diabetes is quite rare. Prevalence of NIDDM among several API groups is higher than in the general White population, while Asians and Pacific Islanders have the lowest rate of death from NIDDM among all population groups in the U.S.

In an earlier study conducted in 1958 and 1959, Sloan examined the ethnic distribution of diabetes among 38,103 adults on the islands of Oahu, Hawaii. Age-adjusted prevalence rates for both total cases of diabetes and new cases of diabetes among Filipinos, Japanese, Koreans, and Chinese were found to be higher than among Caucasians.

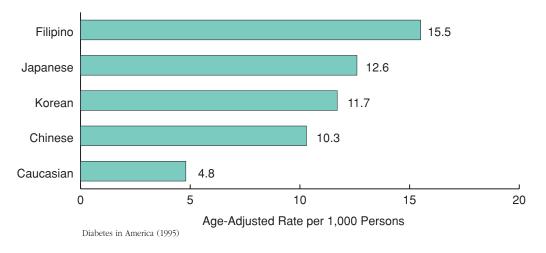
- Filipinos had the highest age-adjusted prevalence of diabetes for both total cases of diabetes, 21.8 per 1,000, and new cases of diabetes, 15.5 per 1,000, among the four largest ethnic Asian subgroups in Hawaii (Chinese, Filipino, Japanese, and Korean).
- Chinese were found to have the lowest age-adjusted prevalence of both total cases of diabetes, 14.6 per 1,000, and new cases of diabetes, 10.3 per 1,000, among the four Asian subgroups in Hawaii.

Age-Adjusted Prevalence of New Cases of Diabetes and Total Cases of Diabetes on the Island of Oahu, 1958-59

Total Cases of Diabetes



New Cases of Diabetes



In a more recent study conducted between 1983-1988, Japanese Americans residing in Seattle, Washington were found to have a higher prevalence of NIDDM than both the U.S. White population and Japanese from Tokyo. These findings not only affirm Sloan's conclusions, but also other earlier studies that reported a higher prevalence of diabetes among Japanese Americans than Japanese residing in Hiroshima, Japan.

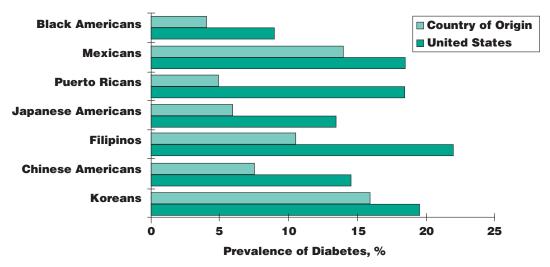
- Prevalence of diabetes was 20% and 16% among second-generation (Nisei) Japanese American men and women between 45-74 years old. The prevalence of impaired glucose tolerance (IGT) was 36% in Nisei men and 40% in Nisei women.
- Prevalence of NIDDM in Nisei men, 20%, was twice that of similarly aged men in the U.S. White population, 12%, and four times greater than similarly aged men in Tokyo, 5%. The prevalence of diabetes for Nisei women, 16%, was similar to those of White women in the U.S., 14%, but was significantly higher than Japanese women in Tokyo, 4%.

 Nisei women also showed a greater propensity of progressing to impaired glucose tolerance and NIDDM than Nisei men due to increased risk of developing central obesity and insulin resistance after menopause.

Age-Specific Prevalence of Diabetes in U.S., Tokyo, and Seattle in Nisei Men and Women

	Year	Age (years)	Men	Women
U.S. White	1976-80	45-74	12%	14%
Tokyo	1981-82	> 40	5%	4%
Seattle Nisei	1983-85	45-74	20%	-
Seattle Nisei	1986-88	45-74	-	16%
Diabetes in America (1999)	5)			

• A meta-analysis reviewing available information on prevalence of NIDDM among minorities in the U.S. between 1976-1994 reported that Chinese, Japanese, Korean, and Filipino immigrants have a much higher prevalence of NIDDM than their counterparts in Asia. Results are summarized in the following table:



Prevalence of Diabetes Mellitus in Minority Populations.

Rate in country of origin compared with rate in the United States.

Annals of Internal Medicine, 125(3),1996

Other studies have shown that:

- Among the Hmong population in Los Angeles 40 years and older, the prevalence of diabetes is 12.5%
- American Samoans aged 30+ have prevalence rates of NIDDM between 9%-18.8%.
- According to a study conducted in 1985 among Native Hawaiians living in Molokai,
 Hawaii, prevalence rates of diabetes were 2% for ages 20-29, 4% for ages 30-39, 16% for
 ages 40-49, and 23% for ages 50-59. Prevalence rates of diabetes for Native Hawaiians
 were higher than that of the White population for all age groups reported between 19761980 in the National Health and Nutrition Examination Survey.

Factors contributing to the increased prevalence of NIDDM among the Asians and Pacific Islanders include:

- Level of acculturation.
- Dietary changes from a low fat traditional diet to a high fat western diet.
- Stress from immigration.
- Decrease in physical activity where the association between physical activity and the risk
 of diabetes was found to be statistically significant and independent of age, obesity, and
 family history.
- Increase risk of developing intra-abdominal adiposity.

Among the Pacific Islander population, obesity and urbanization are also factors increasing the risk of diabetes.

Genetic susceptibility is being examined to account for the prevalence of NIDDM and IGT in both the Pacific Islander and Asian Indian populations.

- Studies demonstrate that ethnicity and genetic susceptibility, rather than obesity play a
 more significant role in accounting for the prevalence of diabetes among Pacific Islander
 populations. Although obesity has long been regarded as a prominent risk factor for
 NIDDM, the relationship between the two is not inevitable in the Pacific Islander
 population.
- Theories such as the existence of a thrifty gene, a diabetic genotype, that allows the
 Pacific Islander population survival advantages in famine situations have been proposed
 to explain the high prevalence of diabetes among this population. People genetically
 predisposed to diabetes are believed to better store food as adipose tissues and conserve
 glucose in times of starvation. Due to the effects of westernization where foods are
 readily available, this genetic predisposition has adverse effects as it leads to a high
 prevalence of diabetes.
- Asian Indian vegetarians have been shown to be a population that is likely to develop
 risk factors associated with IGT and NIDDM. In a study that compared Asian Indian and
 American vegetarians and their susceptibility to developing IGT, results indicate that Asian
 Indians may possess a genetic predisposition to IGT.

Socioeconomic status affects the prevalence of diabetes. Among Japanese Americans, there was a positive association between lower socioeconomic status or education level and higher prevalence of diabetes.

The increased prevalence of diabetes among Asians and Pacific Islanders compared to prevalence rates in countries of origin and the greater U.S. White population demonstrates how environmental factors influence the risk for NIDDM. Additionally, the high levels of diabetes will place Asians and Pacific Islanders at a higher risk of developing end state renal and cardiovascular diseases. Epidemiological studies of Asians and Pacific Islanders are of great interest to health care providers as Asian countries begin to adopt the dietary habits and lifestyle of western societies, the health status of Asians and Pacific Islanders offer a window into the possible future health status of API individuals.

Thalassemia

Thalassemia, a genetically transmitted anemia, is believed to be advantageous in resistance to malaria and is thought to have originated and increased in areas such as Southeast Asia where malaria was once endemic. Hemoglobin E (Hb E) is the most common form of thalassemia among Southeast Asians from Cambodia, Laos, and Thailand and is the second most common abnormal hemoglobin in the world. The mutation of Hb E in Cambodians is distinct from that found in Laotians and Thais, while the presence of the same haplotype for Hb E mutation in lowland Laotians and Thais demonstrate a close relationship between the two populations. Although the Hmong live in the highlands of Laos and Thailand, they are an ethnically distinct population related to the Chinese and do not share the high prevalence of Hb E found in Cambodians, Thais and lowland Laotians. Hb E is also less common among Chinese and Vietnamese. Other structural variants of thalassemias such as α - and β -thalassemia are also found throughout Asia, where significant regional variation in prevalence exists.

In 1990, California enforced a universal mandatory screening for four genetic and congenital disorders of all infants born in this state. In assessing the epidemiologies of hemoglobinopathies in California, two clinically significant types of thalassemia, Hb E/ Beta Thal and alpha-thalassemia were measured in 2001.

- For Hb E/Beta Thal, the only cases that were reported were among Cambodian, Laotian, Indian and Cambo-Laotian.
- For alpha-Thal, 52 cases were reported with Chinese, Filipinos and Vietnamese comprising more than half of all the total cases.

These data do not reflect the true number of cases since most cases die in utero, are stillborn or die before a newborn screen is taken.

In another study, the frequency and prevalence of Hb E and α – and β -thalassemia among five major Southeast Asian groups, Cambodians, Vietnamese, Hmong, Lao Laum, and Tai Dam, from four Midwestern communities were reported. According to this study, the resettlement program for Southeast Asian refugees has resulted in the immigrations of thousands of persons with Hb E, α - and β -thalassemia disorders. The observed frequencies, as this study indicates, are among the highest in the world and among the highest recorded in the United States for any one ethnic group.

- Among the Southeast Asian population in the Midwest, the Lao Laum (Laotians) and the Khmer (Cambodians) had the two highest prevalence rates, 36% and 31%, respectively for the Hemoglobin E while Vietnamese, 2%, and Hmong, 4%, had the two lowest prevalence rates.
- For both α -Thalassemia and β -thalassemia trait, the Tai Dam were shown to have the highest rate of prevalence at 14% and 8%, respectively, among the Southeast Asian population.

Thalassemia is relatively uncommon among the Chinese but regional variations do exist. Case reports of thalassemia are common in the southeastern provinces of Guangdong and Guangxi. In a study conducted in Boston Chinatown, where 90% of all participants had originated from Guangdong, China, a high prevalence of thalassemia carriers, 13.8%, was reported.

Among Pacific Islanders, the high prevalence of α -thalassemia is also believed to have developed due to a selective advantage given by malaria infection. A study conducted among

Polynesian Samoans residing in San Francisco and San Mateo, California, however, reported a low frequency of α - and β -thalassemia, which suggests that unlike Melanesia where malaria is endemic, Polynesia may have much lower levels of malaria.

Cardiovascular Diseases

Heart disease is the leading cause of death among Asians and Pacific Islanders. In examining the attributable risks for heart disease among Asians and Pacific Islanders, the heterogeneity of the API community becomes evident as each group exhibits different risk factors: Japanese Americans have high levels of serum cholesterol that account for their susceptibility to developing cardiovascular disease; high rates of smoking among Southeast Asian men place them at risk, and the high prevalence of obesity among Samoans and Native Hawaiians increases their susceptibility of developing various heart diseases.

Hypertension

Studies show that hypertension is a risk factor for cardiovascular disease among certain subgroups within the API community. Rates of hypertension among Asians and Pacific Islanders are generally lower than that of the U.S. White population, except for Filipino Americans, which are higher. Rates of hypertension among Asian Americans are generally higher than Asians in Asia. High rates of hypertension are most often associated with older age, male gender, glucose intolerance, cigarette smoking, and centralized obesity.

The National Heart, Lung, and Blood Institute awarded a six-year contract to the California Department of Health Services in 1977 to develop a statewide program for the control of high blood pressure. A major statewide survey conducted in 1979 sampled 8,353 adults aged 18 years and over, examining the prevalence of hypertension among California's four major racial groups: Whites, Blacks, Asians and Pacific Islanders, and Hispanics. Within the API population, data were obtained separately for Chinese, Japanese, Filipinos, and other Asians and Pacific Islanders.

- The prevalence of hypertension among Chinese (15.7%) and Japanese Americans (12.5%) for both sexes, and in all age groups were lower than White Americans (20.2%) and Black Americans (26.0%).
- Filipino Americans for both sexes, and in all age groups had the highest rate of hypertension among the sampled Asian and Pacific Islander population (24.5%). Rates of hypertension for Filipino Americans for both sexes and all age groups were also higher than the general White population.

In a more recent study conducted between 1986-1988, hypertensive rates of native Japanese residing in Hawaii, Los Angeles, and Hiroshima were recorded.

- Results indicate that the sex and age adjusted prevalence of hypertension among Japanese was higher in Hawaii, 42.6%, and Los Angeles, 37.2%, than in Hiroshima, 29%.
- Since research participants were all native Japanese born mostly in Hiroshima, the attributable differences in the prevalence of hypertension between Japanese living in Hawaii, Los Angeles, and Hiroshima is believed to be due primarily to environmental, rather than genetic factors.

The Molokai Heart Study (MHS), which surveyed Native Hawaiians between the ages 20-59 on the Island of Molokai, Hawaii in 1985 showed that:

- The prevalence of hypertension among Native Hawaiians for both sexes and in almost all age groups is lower than the prevalence rates of hypertension for the general White population reported in the National Health and Nutrition Examination Survey between 1976-1980.
- Just 35% of Native Hawaiian males between the ages 20-24 had optimal blood pressure where 84.6% of women in the same age group had optimal rates. The prevalence of optimal blood pressure dropped to 23.1% among Native Hawaiian male ages 55-59 and 16.7% among women within the same age group.

In a study among the Hmong in Los Angeles, 40 years old and above, 18% reported being hypertensive.

A prospective study carried out by Klatsky and colleagues explored the risk of hospitalization for ischemic heart disease among Kaiser Permanente Asian members in northern California. The findings showed significant differences in relative risk among different Asian groups. The researchers used Whites as the reference category and found that age-adjusted relative risk rates were similar to that of Whites among Japanese and Filipino Americans, while those of South Asians were four times that of Whites. The Chinese Americans' rate was almost half that of Whites. Among all groups, men's rates were higher than women's, and only Filipino women had a higher risk for hospitalization than White women.

Several factors have been explored to account for hypertension among Asians and Pacific Islanders. Since most Asian groups in Asia have a lower prevalence of hypertension than Asian Americans, environmental rather than genetic factors appear responsible for the increased rate of blood pressure among Asians in America.

- A change in dietary habits and increased consumption of high calorie American foods heightens the risk of hypertension.
- Depression, mood swings and stress, common among immigrant API population, are associated with elevated levels of blood pressure.

In treating hypertension among Asian Americans, the impact of antihypertensive medications on Asians has been assessed:

- Asian patients changed antihypertensive medications twice as often as White patients. The
 increase in frequency among Asian patients in altering medications was because they
 experienced more side effects than White patients.
- Studies show that therapeutic effects in Asian patients could be achieved through lower dosages than those commonly prescribed for the general White population.
- In looking for reasons to explain racial and ethnic differences and their response to antihypertensive medications, body mass and dietary habits should be considered. Since the weight of most Asians is significantly lower than Whites, body mass should be taken into account when determining dosages.

Cerebrovascular Disease

Stroke is a major cause of death in East Asia, Southeast Asia, and the Pacific Islands. The high prevalence of this disease in these countries presents serious health implications for first-generation API immigrants in America.

The 1997 California Heart Disease and Stroke Prevention Program Report showed great variation in the death rates for stroke among Asian and Pacific Islander subgroups living in the state.

- Death rates for stroke among Japanese were the highest (55.7 per 100,000) while death rates for stroke among Asian Indians were the lowest (6.2 per 100,000).
- Death rates for stroke were also in the upper end of the continuum among Hawaiians (37.0 per 100,000), Chinese (33.2 per 100,000) and Filipinos (36.4 per 100,000).

The extreme variance in stroke mortality across Asian and Pacific Islander subgroups illustrates the danger of assuming Asian homogeneity in disease patterns.

Whereas Blacks, Chinese, and Japanese have more intracranial occlusive cerebrovascular disease, Whites have more extracranial disease.

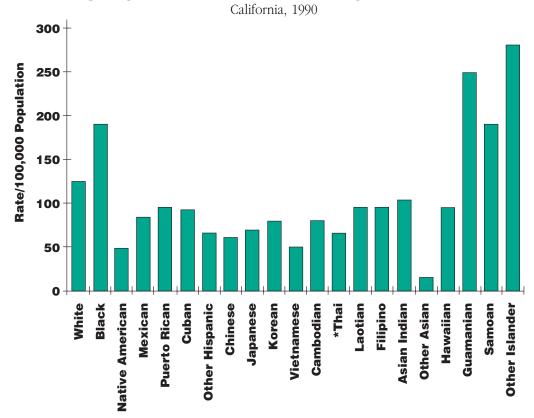
Factors contributing to the prevalence of stroke include:

- High sodium and saturated fat intake,
- Uncontrolled hypertension (lower among Chinese and Japanese), and;
- Smoking (higher among Japanese, Koreans and Southeast Asians.)

Coronary Heart Disease

Although coronary heart disease (CHD) is currently the leading cause of death in America, age-adjusted death rates for coronary heart disease among most Asian American subgroups, according to Analysis of Health Indicators for California's Minority Populations, 1990, is lower than the general White population in California. However, death rates for coronary heart disease among the Pacific Islander population in California were all higher than Whites, except for Native Hawaiians.

Age-Adjusted Death Rates for Coronary Heart Disease



Source: California Death Records

*Rate considered unreliable, Relative Standard Error>30%

- Among Asian Americans, Chinese, 59.7 per 100,000, Japanese, 63.3 per 100,000, Koreans, 69.5 per 100,000, Vietnamese, 48.0 per 100,000, Cambodians, 65.1 per 100,000, Thai 51.3 per 100,000, Laotians, 84.6 per 100,000, and Asian Indians, 103.5 per 100,000, all had death rates due to coronary heart disease lower than the White population in California, 120.7 per 100,000.
- Among the Pacific Islander population, both Guamanian at 243.8 per 100,000 and American Samoan at 193.7 per 100,000 had death rates due to CHD much higher than the White population at 120.7 per 100,000 in California. Native Hawaiians at 93.5 per 100,000 had death rates lower than the general White population.

Two of the most common shortcomings of acculturation are decreased levels of physical activity and increased centralized adiposity. Both increase the risk of developing coronary heart disease among Asians and Pacific Islanders.

While increased level of acculturation threatens the overall health status of Asians and Pacific Islanders, what is more detrimental is the lack of awareness of preventable risk factors contributing to the development of cardiovascular diseases.

According to the 1979 California Hypertension Survey, Chinese, Japanese, and Filipino
Americans, despite their high average levels of education, were less well-informed about
the consequences, nature, and treatment of high blood pressure than the average adult in
California. Among these three Asian groups, Japanese Americans were the most
knowledgeable about hypertension, although still less informed than the overall

population in California. Chinese Americans demonstrated a general lack of understanding about the consequences and nature of hypertension.

- Among Southeast Asians residing in central Ohio, 94% reported that they had no knowledge of what blood pressure is, while 85% did not know what to do to prevent heart disease.
- Korean American elderly in San Jose, California were also generally unaware of the risk factors contributing to cardiovascular disease. Sixty-two percent reported to have never thought about heart disease and do not know how to reduce chances of having a heart attack. Forty-nine percent among Korean American elderly believed that they will never develop heart disease. Fifty-four percent also said that they were uninterested in changing their habits in order to reduce risks of cardiovascular diseases.

Factors contributing to the lack of awareness of risk factors for cardiovascular disease include:

- High percentage of foreign-born immigrants. The immigrant population from places such as Southeast Asia may have received less language accessible information on cardiovascular risk factors in native countries.
- Lack of familiarity with western health care system and reliance on traditional medicines.
- Lack of culturally aware health care providers often resulting in distrust of western health care professionals.

Among Asians and Pacific Islanders, many Southeast Asians and the elderly possess little knowledge on how to prevent cardiovascular disease. Japanese Americans, on the other hand, are generally well informed. In the Seattle study, three-fourths of Japanese Americans were aware of their hypertension. Half of the Japanese Americans diagnosed with hypertension were taking antihypertensive medication.

Cancer

Cancer incidence among Asians and Pacific Islanders tends to vary with ethnicity, gender, and site-specific incidence. In examining the various causes of cancer, environmental factors, viral agents, and genetic predisposition are explored.

Liver Cancer

Since many Asians and Pacific Islanders have a high prevalence of hepatitis B virus (HBV), they are at a high risk of developing liver cancer as it is well established that HBV can lead to the development of liver cancer. A recent study compared incidence rates of liver cancer in Chinese, Japanese, and Filipinos born in their respective Asian countries and the U.S. with the incidence of liver cancer in U.S.-born Whites. Annual incidence of liver cancer cases were examined between 1973 and 1986 and restricted to ages 15-84 from population-based cancer registries in San Francisco/Oakland (CA) metropolitan area, 13 counties of western Washington, and Hawaii. Major results show an important gender difference:

- In general, Asians, both U.S. and Asia-born had higher incidence of liver cancer than U.S. Whites.
- Chinese women born in the U.S. were the only female group with a higher incidence of liver cancer (3.7%) than their Asian-born counterparts (2.2%).

• Rates for liver cancer among men born in Asia were significantly higher than Asian men born in the U.S. and U.S. White males. However, Chinese American males at a rate of 9.8 per 100,000 had higher rates than Japanese and Filipino American men.

According to another study, the Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute, 1977-1983, the age-adjusted incidence rates per 100,000 population of liver cancer combining both sexes among Chinese, Japanese, and Filipino Americans were 9.6, 3.6, and 5.4, higher than that of Whites, 2.2 per 100,000. As in the previous research, Chinese Americans had higher rates than other Asian American groups.

Colorectal Cancer

Incidence of colorectal cancer among Japanese, Filipino Americans for both sexes as reported in the SEER, 1988-1992, was higher than the larger White population. With increased level of acculturation and adoption of the American diet, the incidence of colorectal cancer among Asian Americans may increase.

Average Annual Age-Adjusted Cancer Incidence Rates per 100,000 Population, For Chinese, Japanese, Filipinos and Whites, SEER Areas, 1988-1992

	Male	Female
Colon & Rectum		
Chinese	44.8	33.6
Japanese	64.1	39.5
Filipino	35.4	20.9
White Non-Hispanic	56.3	38.3

Adapted from: National Cancer Institute, Surveillance, Epidemiology and End Results, 1988-1992

Among the four groups, Japanese Americans of both sexes had the highest incidence rates of colorectal cancer.

In another study, the age standardized incidence rates of colorectal cancer between the years 1968-1981 among White and Chinese Americans from the SEER California Tumor Registry were compared with incidence rates of colorectal cancer among Chinese in Shanghai, China from the Cancer Registry at the Shanghai Tumor Institute. Results showed that living in the U.S. was correlated with increased incidence of colorectal cancer among Chinese Americans. The table below summarizes differences in rates for just the 1978-1981 time period for both men and women.

Age-Standardized Incidence Rates of Cancers of the Colon, Rectum In the U.S. and Shanghai, China, 1978-1981

	Male	Female
Colon		
Chinese	8.3	7.5
Chinese-American	24.4	15.7
White Non-Hispanic	34.3	26.6

	Male	Female
Rectum		
Chinese	9.8	7.3
Chinese-American	11.1	9.3
White Non-Hispanic	17.7	11.4

Adapted from: Comparative Epidemiology of Cancers of the Colon, Rectum, Prostate and Breast, Yu et al. International Journal of Epidemiology, 20(1):76.

- Age-adjusted incidence rates of colorectal cancer among Chinese from Shanghai for both sexes between 1968-1981 were consistently lower than incidence rates of colorectal cancer among White Americans. Chinese Americans for both sexes between 1968-1981 had intermediary incidence rates between White Americans and Chinese from Shanghai, China.
- The incidence rate of colon cancer among White American males, 34.3 per 100,000, was four times the rate of colon cancer among Chinese males from Shanghai, 8.3 per 100,000. The incidence rate among White American women, 26.6 per 100,000, was also nearly four times the rate of Chinese women from Shanghai, 7.5 per 100,000. Chinese Americans at 24.4 per 100,000 for males and 15.7 per 100,000 for females had intermediary incidence rate of colon cancer between White Americans and Chinese from Shanghai, China.

Similar differences in the same direction were found across all time periods assessed by the research, beginning in 1968. It will be recalled that Chinese began immigrating to the U.S. in high numbers in 1965.

Factors commonly associated with the effects of westernization such as increased consumption of high-fat, high-protein, and low-carbohydrate diets and decrease in physical activity all are likely to contribute to the higher incidence of colorectal cancer among Chinese Americans compared to Chinese from China. Frequent consumption of alcohol, smoking, and family history are also risk factors for colorectal cancer.

Gastric Cancer

While the incidence of gastric cancer among the general population in the United States is decreasing, it is still the most common malignant neoplasm among Asians in China, Japan, and Korea, with the highest rates in Japan and Korea.

According to SEER, 1988-1992, Chinese, Hawaiian, Korean, Vietnamese and Japanese
Americans for both sexes had incidence rates of stomach cancer higher than White
Americans. For example, Korean men had a 48.9 per 100,000 incidence rate of stomach
cancer compared with 10.2 per 100,000 among White men. Vietnamese women had a
25.8 per 100,000 incidence rate compared with 4.4 per 100,000 among White women.

While the rates of gastric cancer among Japanese and Chinese seemed to stay relatively the same upon immigration to the United States, the rates for Koreans increase dramatically.

• In Los Angeles County, gastric cancer incidence is five times greater in Korean males, 44.8 per 100,000, than in White males, 8.6 per 100,000.

A study that compared stomach cancer rates in Korean immigrants and Whites in Illinois, 1986-1988, found age adjusted incidence rates of gastric cancer in Korean immigrants to be 20.9 per 100,000, which were 2.5 times higher than Whites (8.4 per 100,000). The incidence rate of gastric cancer among Korean immigrants in Illinois was also 40% and 70% higher than native Korean males (18.1 per 100,000) and females (10.5 per 100,000).

Consumption of nitrate or nitrite, red pepper possibly contribute to the high incidence of gastric cancer among Asians and Asian Americans.

Lung Cancer

Lung cancer incidence rates (per 100,000) range from a low of 15 among American Indians to a high of 117 among African Americans. Asian and Pacific Islander subgroups fall between these two extremes, with Hawaiian men having the highest incidence rate (89.0) for lung cancer.

Average Annual Age-Adjusted Lung Cancer Incidence Rates per 100,000 Population, For Chinese, Hawaiian, Filipinos and Whites, SEER Areas, 1988-1992.

	Male	Female
Chinese	52.1	25.3
Hawaiian	89.0	43.1
Filipino	52.6	17.5
White Non-Hispanic	79.0	43.7

Adapted from: National Cancer Institute, SEER, 1988-1992.

According to the University of Southern California Cancer Surveillance Program and the Hawaii Tumor Registry, lung cancer was the most commonly diagnosed cancer among American Samoan men at 26% and the second most commonly diagnosed cancer among American Samoan women at 11.3%.

Lung cancer is currently the leading cause of cancer death accounting for 28% of all cancer deaths in the United States, according to *Healthy People 2010*. Death rates for lung cancer among Asians and Pacific Islanders are summarized below:

Average Annual Age-Adjusted Lung Cancer Mortality Rates per 100,000 Population, For Chinese, Hawaiian, Filipinos and Whites, SEER Areas, 1988-1992.

	Male	Female
Chinese	40.1	18.5
Hawaiian	88.9	44.1
Filipino	29.8	10.0
White Non-Hispanic	74.2	32.9

Adapted from: National Cancer Institute, SEER, 1988-1992.

Cigarette smoking is the major cause of lung cancer and outweighs all other risk factors in its effects. Given the relatively high levels of smoking among males in many Asian American groups reviewed earlier, these lung cancer rates may be conservative. For example, Southeast Asian men with the second highest smoking rate in the United States, 55%, are at especially high risk of developing lung cancer. Unfortunately, data on incidence of and mortality from lung cancer are not available for Southeast Asians.

Nasopharyngeal Cancer

Nasopharyngeal cancer (NPC) is a fairly rare cancer in most parts of the world. However, NPC is the most common form of cancer in the city of Guangzhou (Canton) in China and constitutes about 32% of all cancer in this area. Consumption of Chinese salted fish during childhood, hereditary factors and the presence of the Epstein-Barr virus are associated with NPC. Since most Chinese-Americans are descendants or immigrants from the Canton area, familial patterns of food consumption are followed, and it is common to find Chinese salted fish readily available in Chinese-owned markets.

In a retrospective case-control study, researchers from the Guangdong Provincial People's Hospital discovered that a statistically significant number of cases had consumed Chinese salted fish as infants more often than the controls, especially during weaning. Chinese salted fish is commonly added to a weaning child's porridge in order to terminate nursing.

Health education campaigns in China to reduce consumption of Chinese salted fish during the weaning ages of 6 to 18 months have been very successful. However, no formalized public health education has taken place in the United States.

Prostate Cancer

Prostate carcinoma is currently the most commonly diagnosed cancer among men in the United States. The distribution among ethnic groups is highly variable: Black males have the highest rate, Asian Americans the lowest, and Whites have intermediary rates.

- Compared with White males, African American men have a 70% increase in risk while Asian American men have a 60% decrease in risk for prostate cancer in Los Angeles County, California.
- According to the University of Southern California Cancer Surveillance Program and the Hawaii Tumor Registry, prostate cancer was the second most commonly diagnosed cancer among American Samoan men residing in Los Angeles County, California and Hawaii at 13.3%.

Multiple studies which explore prostate cancer in relation to diet, physical activity, and body size in Blacks, Whites, and Asians in the U.S. and Canada, show that saturated fat intake has a causal role in prostate cancer in all groups. Other factors are hypothesized to be responsible for inter-ethnic differences.

- Genetic variability of the 3' untranslated region of the human SRD5A2 gene has been
 explored among African American, Asian Americans, and non-Hispanic White males to
 account for ethnic differences in prostate cancer. Results suggest that differences in
 androgen metabolism, and in particular, DHT levels may contribute to the high risk of
 prostate cancer among African American men and low risk among Asian American men.
- Family history has been shown to have a positive association with prostate cancer.

In surveying cancer risks among Asians and Pacific Islanders, special attention needs to be given to Southeast Asians as many possess little knowledge regarding cancer prevention.

Summary Of API Populations At High Risk For Specific Cancers

Cancer	High Risk API Population	Primary Risk Factors
Breast (See Ob/Gyn Section Pp Xx-Xx)	Samoan Filipino Chinese Japanese Native Hawaiians	Westernization
Gastric	Chinese Japanese Korean Males	Diets High In Meats, Fats, Nitrates, Red Peppers, Sodium And Starch Westernization
Liver	Chinese	Hepatitis B Carriage
Lung	Chinese American Males Samoan Males	Cigarette Smoking
Nasopharyngeal	Chinese	Consumption Of Chinese Salted Fish Epstein-Barr Virus
Prostate	Samoan Males	Diet High In Saturated Fats

Implications for Kaiser Permanente Care Providers

While a general trend among Asians and Pacific Islanders indicates increasing levels of acculturation often lead to an increasing prevalence of diseases common among western societies, the growth in prevalence of each disease differs from group to group. Attributable risks factors for each disease also vary accordingly.

• Be aware of an increased prevalence of diabetes and colorectal cancer among Asians and Pacific Islanders.

- While thalassemia, a genetic anemic disease, is prevalent primarily among Southeast
 Asians, the increase in racial/ethnic intermarriage with this population can ultimately
 result in the increase in prevalence of this blood disease among the growing
 biracial/biethnic population in the U.S.
- Hypertension, while low in most Asian and Pacific Islander groups, is more prevalent in South East Asian groups. When treating API members for hypertension consider the potential side effects of anti-hypertensive medication may be greater for API patients, necessitating lower dosage.
- While death rates from stroke are variable between API populations, Southeast Asians and Samoans have high death rates from stroke.

In working with Southeast Asians and the elderly in particular, it is wise to assess their familiarity with diseases and knowledge of preventable risk factors contributing to disease. As has been shown, many Southeast Asians in particular, have never heard of certain diseases and do not realize that certain habits are risk factors for a particular disease. For example:

- In one sample of Vietnamese adults in the San Francisco Bay area, 13% reported never having heard of cancer before. Twenty-seven percent did not know that cigarette smoking causes cancer and 28% believed that cancer was contagious.
- While liver cancer is common among Southeast Asians due the prevalence of hepatitis B, 48% had never heard of hepatitis B.
- Among Vietnamese women, 32% never had a Papanicolaou test, 28% never had a breast examination, and 83% never had a mammogram.

Providers may want to intervene by educating Southeast Asians within a culturally sensitive framework about the causes of certain diseases and preventable behaviors that may help reduce risk

INFECTIOUS DISEASES

Introduction

Since 1975, the huge influx of Southeast refugees from Vietnam, Cambodia and Laos to the United States has made a significant impact on the overall health status in America. Thalassemia, a hereditary blood disease prevalent among Southeast Asians, has assumed clinical importance in the past two decades while parasitic infestations have also become a major concern for health care providers assessing the epidemiology of refugees. Additionally, the rise of Asian immigrants and refugees in the U.S. has resulted in an increase in the number of tuberculosis cases reported annually. As hepatitis B is endemic in most Asian countries, many Asian immigrants and refugees are also hepatitis B virus (HBV) carriers, placing them at a high risk of developing chronic hepatitis, cirrhosis, and hepatocellular carcinoma. Although Asians and Pacific Islanders have a lower incidence of diagnosed cases of sexually transmitted diseases, such as AIDS, than non-Latino Whites, Black and Latinos, they are less aware of risk factors and preventative measures. The growing Asian immigrant and refugee population in the U.S. could become a potential infective source of tuberculosis, hepatitis B and Sexually Transmitted Diseases (STDs).

Parasitic Infestations

While not a major issue among most Asian and Pacific Islander populations, intestinal parasitic infestations have been a growing concern for health care providers treating the Southeast Asian population. While the first wave of Southeast Asian refugees who arrived in 1975 were from urban centers and received medical attention before immigration, subsequent waves of Southeast Asian refugees originated from more rural areas and received very minimal medical attention prior to immigration. Nearly all refugees were detained in refugee camps in countries such as Thailand and Hong Kong where they lived under crowded and unsanitary conditions. The high rates of infection among the refugee population is believed to be more related to conditions in refugee camps than in the refugees' native countries.

A search of the Medical Laboratory records in the Minnesota Department of Health was conducted for persons infected with intestinal parasites in the years 1961-1965 where 765 (8.4%) persons were infected: each succeeding five-year period reported an increase in the number of persons infected. The most significant increase was detected between 1976-1980 where 4,810 (52.5%) persons were found to have parasitic infestations. The arrival of Southeast Asian refugees accounted for 1,913 or 40% of the 4,819 infected persons.

In another study conducted between April 1984 to December 1987, stool specimens of Southeast Asian refugees were examined for ova and parasites at the Fort Worth-Tarrant County Public Health Department.

- Of the 1,371 stool specimens obtained, 824 were found to contain one or more parasites. This was a prevalence rate of 60.1%.
- Of the 824 positive stool specimen, 1601 parasites were identified. 783 were protozoa and 818 helminths.
- Among the Southeast Asian refugees that were infected with parasites, Cambodians had the highest prevalence rate at 70.0%. The prevalence rate for Laotians and Vietnamese were 69.7% and 54.3%, respectively.

In examining for parasitic infections among the Southeast Asian refugees, the prevalence rate for children was obtained in a study conducted in Seattle between March 1, 1981 and December 31, 1982 - a time of maximum refugee influx to the Seattle area. Among the 338 children tested, 184 were lowland Laotians, 5 were Lao-Mien, 14 were Hmong, 102 were Cambodian, and 33 were Vietnamese. The overall prevalence rate of parasitic infection among Southeast Asian refugee children was 55.6%. Prevalence rates for the different Southeast Asian ethnicities were: Cambodian, 64.7%, Laotian, 58.2%, Lao-Mien, 40.0%, Vietnamese, 30.3%, and Hmong 21.4%.

Tuberculosis

In 1944, when the Public Health Service Tuberculosis Program was first created, there were 126,000 cases of tuberculosis reported. Since then, there has been a steady decline in the incidence of tuberculosis, and in 1985 there were only approximately 20,000 cases reported. After 1985, however, the pattern reversed and there has since been a steady increase in the number of reported cases of tuberculosis in America with the exception of 5.1% relative decline from 1992 to 1993. The number of cases in 1993 was still 14% higher than the number of cases reported in 1985. Several reasons account for the resurgence of tuberculosis.

- During the 1980s and 1990s, a change in lifestyle in the United States led to an increase in the incidence of tuberculosis in substance abusers, the homeless, prison inmates, and residents of long-term care facilities such as nursing homes.
- An influx of persons from East Asia, Southeast Asia, the Philippines, Latin America, and Haiti has contributed to the increase in the incidence of tuberculosis.
- Another important factor involved the large number of cases of tuberculosis reported in patients with AIDS during the past 10 years.

The influx of foreign-born Asian immigrants played a major role in the overall increase in the incidence of tuberculosis. In 1985, of the 22,201 tuberculosis cases that were reported to the Centers of Disease Control and Prevention, 11.4% or 2,530 cases were Asians and Pacific Islanders.

- The incidence rate for this group was 49.6 per 100,000 which was 8.7 times higher than that of the White population at 5.7 per 100,000.
- Of the 2,357 API patients that reported their country of origin, 93.6% were foreign-born. Twenty-seven percent were from Cambodia, Laos and Vietnam, 25.2% were from the Philippines, 14.7% were from Korea, and 9.6% were from the People's Republic of China.

In 1992, 26,673 cases of tuberculosis were reported to the CDC. From 1985 to 1992, there was a 20.1% increase in the number of tuberculosis cases reported, from 22,201 to 26,673, respectively. While reported cases of TB increased among all groups but Whites and Native Americans, among Hispanics, the number of reported cases increased 74.5%, among Asians and Pacific Islanders by 46.2%, and among non-Hispanic Blacks by 26.8%.

Compared to 1994, the number of reported TB cases in 1995 decreased in each sex and age group and all racial/ethnic groups except for Asians/Pacific Islanders. Among the API population there was a reported 2.9% increase.

The efficiency of isoniazid chemoprophylaxis as a preventative treatment has been studied among Southeast Asian refugees with tuberculosis residing in King County, Washington. The presence of active tuberculosis after isoniazid chemoprophylaxis of Southeast Asian refugees was attributed to either primary drug resistance or to the acquisition of resistance during chemoprophylaxis, due to poor compliance. In this control study conducted by the Seattle-King County Health Department, poor compliance was shown to be a risk factor for the failure of isoniazid chemoprophylaxis only among patients who relapsed with isoniazid-susceptible organisms. For this reason, the development of alternative regimens is crucial in preventative treatment for tuberculosis among refugees and persons from other countries where infection with isoniazid-resistance organisms are common.

Hepatitis B

The Asian Liver Center at Stanford University reports that Asians have the highest rates of hepatitis B of all racial/ethnic groups. Hepatitis rates are as high as 15% for some API subgroups compared to 0.3% in the general U.S. population and APIs account for more than half of all hepatitis B carriers in the U.S. Several studies have been conducted to assess the epidemiology of hepatitis B among Asian American/immigrants and refugees.

• In a 2002 study conducted on more than 700 Vietnamese immigrants residing in the Midwest between 1991-1999, 13.9% were hepatitis B surface antigen (HbsAg)-positive.

- In a study conducted on more than 900 ethnic Chinese residing in Los Angeles and New York, 14% and 9.3%, respectively, were HBsAg-positive. In both cases, HBsAg was detected more frequently among men than women.
- In another survey on Filipino immigrants in Alaska, the prevalence rate for HBsAg was 8% while 43% had HBV antibodies.
- Among Korean immigrants living on the East Coast and in Los Angeles, 7% was reported to be HBsAg-positive and 53% had HBV antibodies.

The prevalence rates of HBV infection among Asian Americans/immigrants and refugees in all cases reported were higher than that of the White and Black population in the United States. According to the National Health and Nutrition Examination Survey (NHANES II), the HBsAg prevalence rate for Whites was 0.2% and for Blacks, 0.9%. Moreover, a recent study that screened for HBV infection among Honolulu students reported that the highest infection rates were found among Asians and Pacific Islanders who were foreign-born. The above cited research reports also determined that the HBV infection and antibody rates detected among the Asian American/immigrant and refugee populations were similar to their respective countries of origin.

In examining the rates of HBV infection, the prevalence of HBsAg positivity among pregnant Asian American immigrant and refugee women deserves close attention as perinatal transmission of HBV from a carrier mother to her infant accounts for at least 50% of total number of HBV carriers in Asian countries. Studies conducted among Southeast Asian refugees living in four Georgia counties have suggested that many of the cases of chronic HBV infection of Asian children born in the U.S. may not be attributable just to perinatal transmission, but also to child-to-child transmission of HBV within and between households. Familial clustering of hepatitis B was also detected among Asian families residing in Los Angeles. In a survey of family members of 53 HBsAg-positive pregnant Asian women, 21% of their spouses were HBsAg-positive and 68% of their offspring were also HBsAg-positive.

Health professionals in pediatric practice will want to be alert to these patterns and screen and educate accordingly.

HIV/AIDS

As a group, Asian Americans are at a lower risk for human immunodeficiency virus (HIV) infection than Blacks, Hispanics, or Whites in the United States. In 2001, the Centers for Disease Control (CDC) reported a total of 455,359 cases of acquired immunodeficiency syndrome (AIDS) among racial/ethnic minorities. These cases represented 57% of the 793,026 AIDS cases reported in the U.S. in 2001. Of the 455,359 cases, 66% (301,784) were reported among Blacks, 32% (145,220) among Hispanics, 1% (5,922) among Asians and Pacific Islanders, and 0.5%(2,433) among American Indians/Alaskan Natives. While the number of cases of HIV/AIDS infection among Asians and Pacific Islanders is still lower than among other racial/ethnic groups in the U.S., careful examination of the statistics from CDC reports indicate that the number of reported AIDS cases is increasing rapidly among the API population. Between 1995 and 2001, the CDC reported a 965% increase from 556 to 5,922 cases of AIDS among Asians and Pacific Islanders. For this reason, special attention has been given to the API population in examining sexual practices and devising ways to help prevent the spread of HIV among API individuals.

In a study that looked at sexual practices of heterosexual Asian American young adults between 18 to 25 years old, questionnaires completed by 153 individual (64 men and 88

women) from one southern California university were examined. In this survey, approximately half were U.S.-born while the remainder were immigrants from Korea, Taiwan, the Philippines, Vietnam, China, Hong Kong, Indonesia, Thailand, and other countries.

- Forty-four percent of the men and 50% of the women had had sexual intercourse at least once in their lives. On average, subjects had at least 2 previous sexual partners. Average age of first sexual intercourse was between 16 to 17 years old. Only 31% reported to always use birth control during sexual intercourse and only 11% used condoms.
- Overall, 47% of these single 18-25-year-old Asian American heterosexuals were sexually
 active. This rate was significantly lower than the 480 other individuals surveyed which
 showed that among Whites, 72% were sexually active, among Blacks, 84%, and among
 Hispanics, 59%.
- Additionally, the 11% of sexually active Asian Americans who used condoms did not differ from the White (11%), Black (11%), or Hispanic (10%) students surveyed.

In examining the sexual practices among Asian Americans, significant variations do exist among different ethnicities. In one study that surveyed 1,272 White, Chinese, and Filipino American 10th and 11th graders in San Francisco, California, Chinese Americans had a lower incidence of sexual activity (13%) than both Whites (37%) and Filipino students (32%). While this significant difference in the incidence of sexual activity between Chinese and Filipino Americans attests to the greater risk for HIV among Filipino Americans, both Filipino American and Chinese American students had poor HIV prevention knowledge and little ability to talk about HIV. This suggests that Filipino Americans may be at a greater risk for HIV infection. Such finding is also supported by a study conducted among the API community in San Diego County, California. This study indicated that over half (56%) of the 91 Asian and Pacific Islander AIDS cases reported in San Diego County as of September 30, 1994 were Filipinos. Moreover, the primary risk factor for HIV transmission among men, according to this study, was homosexual or bisexual contact.

The number of reported cases of HIV/AIDS is rapidly increasing among the API community in the U.S. A 1997 Centers for Disease Control report indicated that a higher age-adjusted percent of Vietnamese (21%) and Asian Indian (18%) adults reported knowing nothing about AIDS compared with Japanese adults (5%.) In addition, a greater proportion of Vietnamese adults (92%) had not been tested for the AIDS virus compared with Chinese, Filipino, Asian Indian and Japanese adults (73%-78%) after adjusting for age.

Several Asian cultural beliefs, however, appear to curtail HIV/AIDS education in this population:

- Many Asians tend to view HIV/AIDS as a western epidemic. Educational materials should emphasize the gradual increase of HIV/AIDS in the API population.
- Some Asians also believe that thinking about illness and death, which are often taboo
 topics in many Asian cultures, are self fulfilling prophecies. Acknowledge this concern,
 and inform them of ways to prevent infection.
- Issues of sexuality and in particular, homosexuality, tend to be taboo subjects among API groups.
- API individuals may feel ashamed of their HIV status and may try to "save face" by hiding their diagnosis from their family and community.

Implications for Kaiser Permanente Care Providers

- High rates of intestinal parasitic infections among Southeast Asian refugee populations and refugee children necessitate early screening.
- Look for alternative treatments for tuberculosis as many Southeast Asian refugees are isoniazid-resistant.
- As hepatitis B is endemic in most Asian countries, health care providers need not only be aware of its high prevalence among Asian Americans/immigrants and refugees but also be attentive to the many APIs who are HBsAg-positive and have a high risk of developing hepatocellular carcinoma.
- Health care providers may find it beneficial to look past the sexual conservatism among
 Asians and Pacific Islander Americans and understand that this population is diverse in
 their sexual behaviors and are also rapidly increasing in the number of HIV/AIDS cases
 reported. Educational materials should emphasize the gradual increase of HIV/AIDS in the
 API population.
- When discussing HIV/AIDS, acknowledge the API patient's concern about speaking of illness or death, and inform them of ways to prevent infection.
- While HIV/AIDS education is appropriate when targeting the API community it needs to be presented in a culturally-sensitive manner, and in the native language whenever possible.

SPECIAL AREAS OF CLINICAL FOCUS: OBSTETRICS/GYNECOLOGY

Pregnancy, Childbirth and the Post-Partum Period

Traditional practices are frequently followed during pregnancy, childbirth and the post-partum period. For many Asian women, these are times when they are recipients of the collective wisdom of women relatives (especially mothers and mothers-in-law) regarding diet and preventive health measures.

- In most Asian cultures, pregnancy is seen as a "warm" condition, during which time the woman should eat warm foods to maintain that warmth for the good of herself and the baby. These foods vary by Asian culture, but tend to be nutritious and high in iron. Since cold foods such as some fruits and vegetables are avoided, a vitamin supplement is often appropriate.
- For many Asian cultures, discussion of stillborns, deformities or other bad outcomes is prohibited, since to do so would enhance the likelihood of bringing such events about. Overall, a woman's state of mind during pregnancy is expected to affect birth outcomes.

Women often feel responsible for premature births, stillborns and birth defects, believing that these are punishments for misdeeds, failure to venerate gods and ancestors or sexual misbehavior.

- Among the majority of API cultures, childbirth has traditionally been strictly a woman's affair, with women in the kinship group aiding the midwife in caring for the laboring mother and the newborn at home. Massaging the mother is often part of the care given. In a few cultures, such as the Hmong, women may deliver with only the help of their husbands, squatting and delivering the child into their own arms. In general, Asian women are expected to bear the pains of labor stoically, making little outcry, lest they bring shame on themselves and their families. After childbirth, the placenta is buried, oftentimes by the father to assure the health of the newborn.
- API women giving birth in hospitals are more likely to be attended in labor by female relatives. Modesty during labor is especially desired, particularly if males are present. Hmongs living in the United States, despite hospital births, request the placenta to take home for burial. Cesarean sections are dreaded and sometimes refused, since cutting into the body might allow unhealthy winds to enter and debilitating blood loss is expected.
- Care of the newborn will vary. Frequently, breastfeeding will not begin until the milk comes in, with the colostrum being considered unfit for the baby's consumption. In some Southeast Asian cultures, the mothers will appear to neglect their newborns, barely holding or looking at them. Some will be very reluctant to give the child a name until several days after birth, or will call them by odd nicknames, "Little Doggie" or "Ugly Piglet." The rationale for these behaviors, in cultures where the infant death rate has historically been high, is to prevent the spirits from coveting and taking the child through death.
- Almost every Asian culture requires a postpartum lying in period for the mother. Even many modern Chinese American women are expected to "do the month" though perhaps in modified fashion. During this time, which begins immediately after the birth, the woman is not allowed to go outdoors or to bathe or wash her hair, and she is kept very warm. Even in summer months, a charcoal fire or a space heater may be used to "roast the mother." No air conditioning is allowed. She is fed a diet of "warm" or Yang foods, similar to the ones fed during pregnancy, with emphasis on herbal soups, chicken and eggs. These measures are taken to ensure the mother's health during a very vulnerable time and to prevent arthritis or joint pain in later years.

Infant Mortality and Low Birth Weight

Asians, including Japanese (4.6), Chinese (5.0) and Filipino (4.4), had lower rates of infant mortality than Whites (8.6), and Blacks (18). A local level report from San Diego County for the years 1978 to 1985 showed somewhat similar rates. The researchers (Rumbaut and Weeks) noted that the low infant mortality rates among the Southeast Asian groups were a significant reduction relative to ratios in their home nations and indicated a positive adjustment to life in the U.S.

Since low birthweight (<2500 g) is a major predictor of infant morbidity and mortality, the study of birthweight outcomes among Asians and Pacific Islanders is a beginning point in looking at API infant health. Data from the 1992 National Natality file, which contains information from birth certificates compiled by the National Center for Health Statistics, showed the birth outcomes of six Asian American subgroups: Chinese, Japanese, Filipino,

Asian Indian, Korean, and Vietnamese, and three Pacific Islander subgroups: Hawaiian, Guamanian, and Samoan. These were compared with the birth outcomes of non-Hispanic Whites (see table). The distribution of maternal risk factors and risks of moderately low birth weight (MLBW = 1500-2499 g) and very low birth weight (VLBW = <1500g) were also compared to non-Hispanic Whites. Moreover, MLBW and VLBW risk among U.S. born Asian mothers were compared with foreign-born mothers among the six Asian American subgroups.

Percentage Distribution of Birth Weight and Race/Ethnicity

- Among Asians, Korean mothers had the fewest MLBW babies and Asian Indians had the most. Chinese mothers had the fewest VLBW babies, and Asian Indians the most.
- Among Pacific Islanders, Samoan mothers had the fewest MLBW babies while Guamanians had the most. Guamanian and Samoan mothers had the fewest VLBW babies while Hawaiians had the most.
- Compared with non-Hispanic White infants, MLBW proportions among all Asian American subgroups, except Korean infants, were higher than non-Hispanic White infants at 3.6%.
 Only Filipino and Asian Indian groups had a higher proportion of VLBW babies than non-Hispanic Whites.
- MLBW proportions among Guamanian and Hawaiian infants were higher than non-Hispanic Whites while MLBW proportions among Samoan infants were lower. VLBW proportions among non-Hispanic Whites at 0,7% was equivalent to VLBW proportions among Guamanian and Samoan infants while Hawaiian infants had higher VLBW proportions than non-Hispanic White infants.
- Asian American mothers, except for Vietnamese mothers, had favorable demographic
 characteristics with relatively low proportions of births to young mothers, mothers with
 less than 12 years of education, and unmarried women. Additionally, Asian American
 mothers, except for Vietnamese mothers, were more likely to have completed at least 16
 years of education than non-Hispanic White mothers.
- Among the Pacific Islander subgroups however, there were relatively high proportions of births to young mothers, mothers with low educational attainments, and unmarried mothers. Additionally low proportions of Pacific Islander mothers had completed at least 16 years of education.

This study found that Asian American mothers, with the exception of Japanese mothers, despite their favorable profiles, were more likely to initiate prenatal care after the first trimester than White mothers. Pacific Islander mothers were shown to have the highest proportions of late or no prenatal care. Over 50% of Samoan mothers were reported to have begun prenatal care after the first trimester or have no prenatal care at all.

• The study concluded that since high rates of MLBW were not correlated with rates of VLBW, a relation associated with high infant morbidity and mortality, the summary measure low birth weight (LBW) *may not* be a meaningful assessment of poor birth weight outcomes for Asian and Pacific Islander subgroups.

Another study used the 1992 California birth certificate database to select all singleton live births to California resident mothers identified as Asian or non-Hispanic White for the purpose of examining the relation between Asian ethnicity/national origin and low birth weight. It

compared the infant birth weight among Cambodian, Chinese, Filipino, Asian Indian, Japanese, Korean, Laotian, Thai, Vietnamese, and non-Hispanic White infants. Again, prenatal characteristics were not a consistent predictor of low birth weight outcomes. It is thought by some researchers that the percentage of moderately low birth weights among Asian babies do not carry the same implications that they do for Whites. There is the possibility that Asian babies are slightly smaller.

An assessment of a multisite database in 1982 (the only available) compared five minute Apgar scores: the percentage of less than seven was 1.8% for Whites, for Chinese, 1.2%, for Japanese, 1.1% and for Filipinos, 1.3%. Apgar scores have not been assessed for other Asian groups. The Apgar score is a measure of the physical condition of the infant at one minute and five minutes after birth; a score of less than seven is cause for concern.

The favorable rates of infant mortality and the Apgar scores of Asian infants are hypothesized to be in part related to low levels of smoking, alcohol consumption and drug use among Asian women.

Hepatitis B

Perinatal transmission of hepatitis B is a major concern affecting the infant health of Asian Americans. Since perinatal transmission of the hepatitis B virus generally results in the development of a chronic hepatitis B surface antigen (HBsAg) carrier state, perinatal transmission is one of the most important modes of transmission worldwide. It has been estimated that among infants born to women that are positive for both the hepatitis B surface antigen and the e antigen, 85% to 90% were infected with the hepatitis B virus and became chronic hepatitis B surface antigen carriers. The high prevalence of HBsAg among Asian American women makes perinatal transmission the hepatitis B an important aspect in assessing infant health. In a study that examined the effectiveness of passive-active prophylaxis (hepatitis B immuno-globulin and hepatitis B vaccine) as an intervention of perinatal transmission of the hepatitis B virus, 18,842 pregnant Asian American women were selected and screened during pregnancy.

- 8.7% of the pregnant Asian American women tested positive for hepatitis B surface antigen and 3.0% also tested positive for hepatitis B e antigen.
- At the time of the study, 113 infants had received hepatitis B immuno-globulin and hepatitis B vaccine. Among these infants 16 became chronic carriers, an incidence of 14.2%.
- The uninfected infants had retained high levels of antibody to surface antigen indicating an active immune response to the vaccine and expected to have long-term protection against the hepatitis B virus.

Breast Cancer

Incidence of breast cancer among Asian and Pacific Islander women is lower than that of White women. As with all major diseases, the effects of westernization appear to have increased the risk of breast cancer among API women.

A study of breast cancer among Chinese, Japanese, and Filipino immigrant women, aged 20-55 years, was conducted during 1983-1987 in San Francisco, Oakland, and Los Angeles, California, and Oahu, Hawaii. Incidence rates of breast cancer among Chinese, Japanese, and

Filipino immigrant women were compared with White women residing in the same areas and with Asian women from China, Japan, and the Philippines. Effects of residence in American society and regional differences on breast cancer incidence among Asian American women were also explored.

Incidence Rates of Breast Cancer for 1983-1987, in Women Aged 20-54 years, for Asian-Americans living in the San Francisco-Oakland MSA, the Los Angeles MSA, or Hawaii; Whites residing in the same communities; and Asians living in the countries of origin

	Inciden	Incidence Rate		
Community, ethnicity	Age Standardized*	Cumulative %		
San Francisco-Oakland, Los An	ngeles, Hawaii			
Whites	91.8	3.45		
Chinese	53.7	2.03		
Japanese	69.0	2.59		
Filipino	72.5	2.72		
China: Shanghai	27.5	1.03		
China: Tianjin	27.4	1.03		
Hong Kong	37.7	1.41		
Singapore Chinese	41.7	1.56		
Japan: Miyagi	40.9	1.53		
Japan: Osaka	28.9	1.08		
Philippines: Manila	54.7	2.06		
Philippines: Rizal	45.7	1.72		

^{*}Age standardized rates are per 100,000 person years. Cumulative incidents rates are per 100 person years. Source: Immigration Patterns and Breast Cancer Risk in Asian-American Women. Zeigler, et al. Journal of the National Cancer Institute, 85(22):1819 (1993).

- The data in the table above suggest that, in all cases, Asian women from China, Japan, and the Philippines had lower breast cancer incidence rates than American White women. Chinese, Japanese, and Filipino women residing in San Francisco-Oakland MSA, Los Angeles MSA, and Hawaii had intermediary rates between White women living in the same areas and Asian women from China, Japan, and the Philippines.
- Filipino American women, at 72.5 per 100,000, had higher incidence rates of breast cancer than either Japanese women, at 69.0 per 100,000, or Chinese American women, at 53.7 per 100,000. Rates of breast cancer among women in the Philippines were also higher than breast cancer incidence rates in China and Japan.

Breast cancer risk for Chinese, Japanese, and Filipino women born in the west was determined to be 60% higher than Asian women born in China, Japan, and the Philippines. Chinese, Japanese, and Filipino women, who lived in the United States for more than seven years had a risk 80% higher than Asian American women who lived in the U.S. less than seven years.

According to the University of Southern California Cancer Surveillance Program and the Hawaii Tumor Registry, breast cancer was the most commonly diagnosed cancer, at 26%, for American Samoan women residing in Los Angeles County, California and Hawaii.

Breast Cancer Screening

Research has indicated that Asian women are less likely than women in the general population to screen for breast cancer. Several factors are believed to contribute to low rates of screening among Asian and Pacific Islander women.

- Health beliefs rooted in Confucius ethos of female sexual modesty prevent many immigrant and elderly Asian women from obtaining breast examinations.
- Lack of education in breast health, language, cultural, and economic barriers also contribute to the low participation in breast screening.
- A study that analyzed a self-reported questionnaire among Chinese American women attending a U.S. midwestern university reported that among Chinese American women only 15% practiced breast self-examination (BSE) monthly, while 48% reported never having performed BSE. Similar results were found in a study of Vietnamese women.
- Rates of breast and cervical examinations among Cambodian and non-Cambodian women, 50 years and older, living in Olmsted County, Minnesota, were compared in a recent study. Twenty-one percent of Cambodian women reported having had a clinical breast examination, 12% had undergone mammography, and 16% had a cervical smear. Among non-Cambodian women, 67% reported to have had clinical breast examination, 63% had undergone mammography, and 37% had a cervical smear.

In the same study, intervention measures were taken where health educators in Olmsted County, Minnesota developed culturally appropriate health materials and a health education videotape in the Cambodian language with four Cambodian women acting as lay consultants. Group appointments were arranged and a project member provided transportation to the clinic. While women waited for their appointment, the educational videotape was shown. These measures resulted in an increase in screening rates 5 times higher than baseline rates. It is likely that with attention to culturally sensitive approaches, screening rates could be increased in other Asian groups.

Implications for Kaiser Permanente Care Providers

- An awareness and understanding of cultural beliefs about childbirth will enhance the trust between the patient and the provider.
- Many Asian women, adhering to the teachings of Confucianism, uphold the virtues of privacy and female sexual modesty and are reluctant to visit obstetricians and gynecologists. This sometimes results in a late detection of serious problems such as cervical cancer. The influence of Confucian beliefs has also been cited to explain why Asian women sometimes refuse mammograms. Among Vietnamese women, 32% never had a Papanicolaou test, 28% never had a breast examination, and 83% never had a mammogram. Patients should be offered the option of a female OB/GYN or female nurse practitioner.
- Culturally sensitive programs should be used to address the need for prenatal care, and breast and cervical cancer screening.
- Moderately low birth weights among Asian babies may not carry the same implications that they do for Whites or African Americans.
- Prenatal transmission of hepatitis B is a concern among some Asian American women.

SPECIAL AREAS OF CLINICAL FOCUS: CHILDHOOD AND ADOLESCENT HEALTH

Three areas are critical in considering the health of Asian American children and adolescents: immunization rates, knowledge about HIV/AIDS, childbearing patterns.

Immunization Rates

The Centers for Disease Control and Prevention reported on vaccination coverage by race/ethnicity and state among children aged 19-35 months in the United States in 2001. The Childhood Immunization Initiative (CII) has established an intensive program to increase vaccination coverage among preschool-aged children and eliminate or reduce vaccine-preventable diseases.

- Asian and Pacific Islander children met the CII vaccination coverage goals of 94% coverage of three or more doses of diphtheria and tetanus toxoids and pertussis (DTP), 90% coverage with three or more doses of hepatitis B vaccine, 90% coverage of three or more doses of poliovirus vaccine, and exceeded the goal of 90% coverage with one or more doses of measles-containing vaccine (MCV).
- Asian and Pacific Islander children living in California (85%) were more likely to receive
 coverage of four or more doses of DTP, three or more doses of poliovirus and one or
 more doses of MCV compared with Asian and Pacific Islander children living in Hawaii
 (77%).

Because immunization is common in most Asian countries, parental resistance or lack of support for immunization does not appear to be a problem. Immunizations were mandatory in refugee camps, so many Southeast Asians previously unfamiliar with this prevention modality became familiar with it. Studies indicate that parental education around childhood immunization schedules is important.

Hepatitis B

Asian and Pacific Islander children have high rates of hepatitis B infection. In an effort to examine trends in hepatitis B vaccination coverage among API children, a 1998 study found that cities with a focused vaccination program for this population significantly increased hepatitis B coverage compared to cities without focused vaccination programs. Approaches varied from providing citywide middle and high school programs to multimedia health promotion campaigns.

A 1999 study showed that among African American, Caucasian, Latino and Vietnamese adolescents residing in Massachussetts, the Vietnamese students were the most likely to know that hepatitis B affects the liver, however, they were the least likely to identify sex with an infected person as a risk factor for infection.

Knowledge of HIV/AIDS

In a study that surveyed 5,385 White and 408 API junior high students from grades 7-9 in northern California using the Youth Risk Behavior Survey, results were:

- Whites were more likely to be sexually experienced, 50%, than APIs, 27%.
- Among sexually experienced APIs, there was no difference in the age of initiation (median age for both groups was 15), number of lifetime partners (median age for both groups was 2), and prevalence of condom use (53% of APIs and 49% of White reported using condoms).
- Whites, however, were more likely to talk about HIV/AIDS (67%) than API students (47%).

In another study that examined AIDS knowledge, attitudes, and behavior among inner city, junior high school students in California, 1,967 students in three junior high students in an inner city school district were surveyed. Among the participants between the ages of 11-16, 33% were Asian, 31% African American, 24% Latino, and 5% White. The community from which these junior high students were from was representative of a high-risk community with 12% Asian, 61% African American, 12% Latino, and 10% White. Forty-three percent of the households received Aid for Families with Dependent Children, 56% of the students lived in single-parent households, primarily single mothers, and 33% of students did not complete high school.

- Asians at 75% demonstrated less knowledge of AIDS than African Americans (81%), Latinos (82%), and Whites (87%).
- Results examining high-risk behaviors for acquiring HIV infection such as sexual intercourse and drug use by gender showed that 42% of the Asian boys and 18% of the girls had engaged in sexual intercourse. Eleven percent of the Asian boys and 5% of the girls used street drugs. Of those who used street drugs, 55% of boys and 68% of girls had used intravenous drugs at some time.
- Among the four racial groups, Asian junior high school students had the lowest percentage of those involved in sexual activity.

Teen Birth Rates

In a Morbidity and Mortality Weekly Report (MMWR), the childbearing patterns among selected racial/ethnic minority groups in the United States in 1991 were summarized.

• For teenagers (aged <20 years) birth rates were highest for Hawaiians, Black non-Hispanics, and Hispanics and lowest for Chinese Americans, Japanese Americans, and "other" Asians and Pacific Islanders.

Implications for Kaiser Permanente Care Providers

The broad genetic and cultural diversity in the API population requires the health
professional to become aware of each culture's specific differences in predisposition to
morbidity, health risk, and approaches to health care. While APIs tend to be welleducated, health behaviors are often influenced by the specific cultural background which

may have health outcome consequences, (i.e: high teen birth rates for Hawaiians, low birth weights for Asian Indians.)

- There can be marked differences in health practices, beliefs and compliance between the different API cultures, and between those who are new immigrants compared to those who are American-acculturated or second generation. Many API parents seek alternative care (i.e., acupuncture) or naturalistic treatments or remedies (i.e., herbalists) and trust in family tradition or senior members of a household for primary medical treatments. This may help explain a tendency for late prenatal care for this natural condition among some API groups.
- In many Asian countries, there is the expectation that a medicine or treatment for most conditions (antibiotics and other US-Rx medicines can be purchased at any pharmacy). Watchful waiting and general medical management advice may be seen as doing nothing. There can be an obvious language barrier, but there may also be a tendency to not offer medical information unless specifically asked. The large variety of health practices and beliefs for APIs require time to explore with parents and adolescents, and this requires finely-tuned communication skills of the professional.
- Practices such as coining, pinching, cupping and moxibustion can leave marks, welts, or burns on the skin that can be mistaken for self-abuse or child abuse (See Health Beliefs and Behaviors - Traditional Medical Treatments.)
- Chinese American women may use salted fish in porridge to wean their babies. Educate these mothers about the risk of nasopharyngeal cancer later in life. (See Major Diseases Cancer Nasopharyngeal Cancer)

SPECIAL AREAS OF CLINICAL FOCUS: MENTAL HEALTH

Introduction

In considering Asian and Pacific Islander mental health needs, we must be aware of the tremendous diversity within this group of individuals. We have to consider not only regional and geographic variables, but also, trauma, class, language, education and immigration factors.

Relatively little is known about the nature and distribution of mental disorders among Asians and Pacific Islanders. No large-scale prevalence studies have been conducted and community level research is minimal. For example, a local level study of four Asian American groups, Chinese, Japanese, Korean and Filipino, was conducted in 1986 using the Center for Epidemiological Studies Depression Scale (CES-D). Findings indicated few differences across groups, but Asian Americans did have higher average scores than Whites: about 19% were identified as cases of depression in the measure. However, no additional information corroborates these findings.

An inspection of the 1980 admission rates per 100,000 civilian population revealed the following results regarding the use of inpatient mental health services by ethnic group:

• Asians and Pacific Islanders (75.4 per 100,000) were admitted to state and county mental hospitals at a lower rate than Whites (136.8 per 100,000), Blacks (364.2 per 100,000), American Indians/Alaskan Natives (306.4 per 100,000), and Hispanics (146 per 100,000).

- For psychiatric services at non-federal general hospitals, both Asians and Pacific Islanders were admitted at 221.7 per 100,000 and Hispanics at 227 per 100,000 had a lower admittance rate than Whites at 284.9 per 100,000. Blacks and American Indians/Alaska Natives at 386.6 and 371.6 respectively had rates higher than Whites.
- In examining the rate of admittance for private psychiatric hospitals where greater earnings and likelihood of having insurance are significant variables in determining the rate of utilization, Whites at 63.4 per 100,000 and Blacks at 62.9 per 100,000 were almost identical in admittance rates. Americans Indians/Alaskan Natives at 41.2 per 100,000, Hispanics at 34.4 per 100,000, and Asians and Pacific Islanders at 25.0 per 100,000 were all lower than Whites.

According to the above data, Asians and Pacific Islanders appear to demonstrate a consistent under-representation in inpatient services. Once admitted, however, results show that at the state and county mental hospitals, the median length of stay among Asians and Pacific Islander Americans at 35 days is longer than Whites at 23 days.

Many studies have documented the under-utilization of mental health services by Asian Americans (see Zane, Takeuchi and Young for a review). This under-utilization has given rise to the notion that Asian Americans may enjoy better mental health than other Americans. However, this has been disputed by researchers who have shown that by the time Asian Americans do use mental health services, their problems have become especially severe. Thus, under-utilization may relate more to concepts about mental health and the salience of mental health services.

Familiarity with various cultural norms that often shape affective expressions and help-seeking behaviors would be helpful to health care providers working with the API community. Variables that act as correlates in assessing the mental health of API immigrants include:

- Access to services
- Marital status
- Generational status
- Education level
- Employment/Occupation
- Income level
- English Proficiency/Language
- Age
- Gender

Presentation of the API Patient

API patients often present physical symptoms as the focus of treatment. This is partially due to the holistic emphasis on union of body and mind. Also, since strong emotional expression is discouraged, physical complaints are more acceptable expressions of psychic distress. The tendency to somaticize may extend beyond the initial presentation stage to influence the actual therapy process itself. In addition to the cultural norms that may limit verbal expression of emotion, somatization among Asians is often ascribed to the lack of vocabulary in their languages which specifically refers to depressive feelings. For example, Chinese patients may use physical metaphors such as, "something is pressing on my chest" with the lack of specific terminology for what they are feeling.

A depressive symptom may be expressed with complaints of constipation, headaches, or general lassitude. Although the therapist might assume that if the patient were suffering from

depression, that all the symptoms might be manifestations of the depression, the patient might assume that the symptoms are the cause of the depressed mood.

Chinese depressives are most likely to present with somatic complaints such as headaches and diarrhea, while Japanese depressives report more gastrointestinal complaints such as poor appetite and indigestion.

However, while the prevalent opinion is that API psychiatric patients tend to somatize their emotional distress, a 1992 review analyzing this phenomenon concluded that 1) somatization is a fairly universal phenomenon and not just a feature of one particular group and 2) it is not possible to resolve that somatization comes from a seeming inability to freely express emotion that is distinctively Asian. It may also be that the conceptualization and labeling of mental illness is different from western cultures where discussion of personal mental states has become a phenomenon of popular culture. Additionally, since Asian cultures emphasize context for expression of affect and emotions, this may modify the display of symptoms other than somatic.

In Asian cultures, it is inappropriate to discuss one's personal affairs with a stranger, so patients may attempt to bring the provider into the family network by exploring common ground through personal questions. The pace of treatment is often slower, and it generally takes longer to engage an API patient. Providers can improve rapport by listening to symptoms before explaining the purpose of history questions, being realistic about the amount of personal history to be obtained initially, using self-disclosure so the patient can confide in the therapist, being sensitive to issues of guilt and shame, and soliciting the involvement of family members in the treatment process.

Nonverbal cues convey most of the meaning of communications in any culture. Awareness of these nonverbal nuances can be used in positive ways. For example, an Asian hostess always crosses the threshold with her guest when she wants to indicate that the person is welcome to return.

Expectations of the API Patient

An API patient comes to a provider expecting an authority who can solve his or her problems. If this expectation is not attained, the patient may never return, leaving the provider with bewilderment because things seemed to go well, or frustration at inaccessibility of the emotional life or "resistance" of the patient. In actuality, the "passivity" of the patient may be a cultural expression of respect for authority. General openers such as, "what brings you here" and "can your tell me more about that" can arouse distrust in the patient who assumes that his medical chart and what the patient has communicated prior to the appointment are already understood by the provider. Silent gaps may occur as the patient waits patiently for the provider to structure the interview, take charge, and provide the solution. Asians and Pacific Islanders tend to have a lower tolerance of ambiguity and tend to prefer structured situations and practical immediate solutions to problems.

Assessing the API Patient

Much of mental health attitudes and treatment in contemporary psychiatry is focused on the identification of pathology, abnormality and illness. Therein lies some potential difficulties for the Asian and Pacific Islander patient who is already very sensitized to shame and "being different" in a society that may discriminate and stereotype them. Most individuals from any cultural/ethnic group fear the stigma of mental health labels. However, the fear of misunderstanding, prejudice and being over-pathologized is especially acute with Asian and

Pacific Islander individuals. A good example of this is labeling Asians as being overly passive dependent or codependent that results from differing norms of deference, respect of authority, and interdependence on family and community. Other labels to be careful of are: overanxious, lacking self-esteem, unassertive and passive aggressive. The whole definition of "self," which psychology bases much of its treatment, can be quite variable and in contrast with White/European standards and perceptions.

It has been noted that perhaps American therapists tend to perform suicide assessments rather hastily by Asian standards. It is helpful to spend a longer time establishing rapport before asking sensitive questions. It is also important to ask patients about how other people in their lives react to current situations. Hostility, energy level, and aggression are important factors in evaluating the potential of suicide of the patient, but sometimes Asians do not show these openly. Also, because of the strong bonds among Asian family members, unexpressed aggression may be directed toward other members of the family. For example, in Japanese culture, parent-child suicide pacts are not uncommon.

Other concerns include:

- Use of assessment protocols not validated or normed for API cultures,
- · Poorly or untranslated assessment tools, and;
- Inadequate interpretation of non-English speakers' responses/statements.

The Refugee Experience

A culturally considerate approach to assessing the mental health of Asian Americans involves, not only an understanding of how the various API cultures express problems on affective concerns, but also an awareness of the specifics of their immigrant experience. The distinction among Southeast Asians of their immigrant status as "refugees" is indicative that their immigration to the U.S. was not always voluntary. Whereas most immigrants have time to prepare for their departure and choose their country of destination, refugees have fled their war torn nations in order to survive and must rely on the availability of other nations to sponsor their immigration. Southeast Asian refugees from Vietnam, Laos, and Cambodia were often detained up to five years in refugee camps before receiving notice from sponsoring nations and have lived under impoverished conditions with inadequate health care and have often suffered from malnutrition. While the first wave of refugees came to the U.S. in 1975 and were generally more educated Vietnamese from urban areas, especially Saigon, the second wave that arrived in 1979 was composed of refugees who were less educated and from the more rural parts of Vietnam, Laos, and Cambodia. Cambodian refugees further suffered under the genocidal regime of Pol Pot from 1977 to 1979. Some refugees from the second wave, commonly known as the "boat people," endured hardships as Thai pirates, often robbed them and raped the women. The Hmong, who considered their mountain home sacred, were forced to leave because of government retribution for their assistance to the U.S. in the Vietnam war. Given this background, factors that should be considered when assessing the mental health of Southeast Asian refugees include stress related to:

- Acculturation
- Bereavement
- Change such as a major loss of status, changes in family role and structural change
- Discrimination
- Trauma

A study that examined a sample of 2,180 Vietnamese, Laotians, and Cambodians refugees from the California Southeast Asia Mental Health Needs Assessment study attempted to determine 1) whether or not pre-migration experiences still had an effect on psychological distress beyond the initial resettlement period in the U.S. and 2) whether or not group differences between Vietnamese, Laotians, and Cambodians exist in pre- and post-migration socio-demographic predictors of psychological distress. The sample was drawn from nine counties in California and was composed of Vietnamese, Laotians, and Cambodians between the ages 18-68 with a median age of 35. The findings are as follows:

- Pre-migration predictors such as number of trauma events, number of years spent in refugee camps, and number of family members who died were still strong predictors of depression and anxiety among all three Southeast Asian groups even after five years or more in the U.S.
- For Vietnamese, the number of trauma events was a significant predictor of depression
 and the number of family members who died was a predictor for anxiety. For
 Cambodians, the number of trauma events and greater number of years spent in refugee
 camps were both predictors for depression and anxiety. For Laotians, the number for
 trauma events was the only pre-migration predictor for depression and anxiety.
- Post-migration concerns such as unemployment, low family income, receipt of public assistance, and low proficiency in speaking English were also significant predictors of stress where group differences in the types of post-migration distress predictors were found.
- For Vietnamese, the post-migration concern of low family income was a predictor for depression and anxiety. For Laotians, receiving public assistance and being unemployed were predictors for depression and anxiety. Cambodians were found to be primarily concerned with pre-migration issues and the smaller family size in U.S. was a significant predictor for depression.
- In assessing the level of English literacy, only 28% of Cambodians compared to 70% Vietnamese and 49% Laotians reported having fair to good English literacy.
- While pre-migration concerns were similar among the three Southeast Asian groups, the
 differences in post-migration concerns demonstrate significant variations in the pattern of
 adjustment in the U.S. Differences are also due to variations in socio-historical
 background and current resources.
- Both Vietnamese and Laotian women were found to be more likely to experience depression and anxiety than their male counterparts. No gender differences in the experience of distress were found.
- Overall, Cambodians have the highest level of both depression and anxiety followed by Laotians and Vietnamese.

Mental Health Concerns Among Adolescents

Post-Traumatic Stress Disorder

Data from the Los Angeles County Department of Mental Health from 1983 to 1988 reported that Asian American adolescents were underrepresented among the population of adolescents who used mental health services. However, the refugee experience of many Southeast Asian youths gives rise to specific mental health concerns. In a study that looked at 170 adolescents from Portland, Oregon, between the years 1990-1992, the predictors of Post Traumatic Stress Disorder (PTSD) such as language accessibility, resettlement stress, current life stress, and war trauma were examined.

- Results showed that stress from war trauma was most consistently reported.
- Resettlement stress and stress from recent life events were also commonly reported.
- War trauma was shown to be strongly related to and predicative of PTSD, but not depression and was not moderated through sex and age.

In a follow-up study that re-interviewed in 1990, 29 out of the 40 students interviewed between 1984-1987 examined the effects of PTSD over time. Despite the presence of significant PTSD, this longitudinal study of Cambodian students demonstrated that while symptoms of PTSD persist, the symptoms were less intense over time, and prevalence of depression also dropped. The functioning of these Cambodian adolescent refugees was impressive: 20 were now enrolled in some form of college and a third were married.

Suicide

Suicide rates among Asian American youth tend to be lower than other cultural groups in the U.S. However, a 2000 large sample study found that Native Hawaiian adolescents had significantly higher rates of attempted suicide than non-Hawaiians living in Hawaii. Researchers speculated that the increased risk for suicide attempts may be linked to the increased cultural stress of being culturally Hawaiian in a western dominated culture. It is therefore, critical to acknowledge the role of cultural conflict in suicide attempts and screen for depression and suicidal behavior.

Older Adults

Mental health may be a major concern affecting Asian and Pacific Islander elderly in the U.S. Factors such as acculturation stress and depression are generally highlighted. For example, 137 Korean immigrants, aged sixty years and older, who had resided in the United States between 1-15 years were surveyed to determine if living in an ethnically homogeneous Korean community in Los Angeles, California, or ethnically heterogeneous communities in Oklahoma affected mental health levels. Variables such as gender, age, years of education, time in the U.S., living with or without children, and living with or without spouse were controlled.

Korean elderly residing within a large, cohesive, ethnically homogenous community such
as Los Angeles, California were shown to have fewer feelings of alienation than those
residing in Oklahoma communities where the Korean population was scattered and
opportunities to speak Korean and socialize with other Koreans were minimized.

- The implication of this study is that immigrants can minimize adjustment problems by locating in an established ethnic community.
- No significant relationship was found between feelings of alienation and gender, years of
 education, and participants who lived with or without children. Living with a spouse was
 seen to be related to lower levels of social isolation.

Among elderly Samoans living in Western Samoa, American Samoa, and urban Honolulu, the effects of modernization and migration on fa'a Samoa, the Samoan way of life, which traditionally emphasized obedience towards elders was examined. Through interviews with 137 young adults (aged 18-37) and 106 older adults (aged 41-82), results indicated significant signs of change and stability in the status of elderly Samoans. Among Samoans residing in America Samoa and urban Honolulu, the status of elders was reported to have declined in the past ten years.

There may be variation across API groups in terms of how elders express depression. Chinese elders may express depression by fatigue, low energy, loss of appetite, constipation and sleep disturbances, while Japanese elders may demonstrate depression through anxiety over minor changes in physical or mental functions, introversion, self-consciousness, self-depreciation and suicidal ideation.

Pharmacological Concerns

Approximately 37% of Asians possess a mutation of CYP2D6 gene causing them to exhibit a lower metabolic capacity (poor metabolizers) than Caucasian extensive metabolizers. The selective serotonin-reuptake inhibitors are known to have high affinity for CYP2D6 and inhibit the metabolism of other drugs. Poor metabolizers may accumulate potentially toxic blood concentrations following the administration of standard doses of substrates dependent on the CYP2D6 isoenzyme.

Neuroleptics metabolized by CYP2D6 include perphenazine, haloperidol, zuclopenthixol, risperidone and thioridazine. Genetic deficiency or significant inhibition of CYP2D6 activity by the inhibitors paroxetine and fluoxetine may result in neuroleptic toxicity.

Most clinical and survey reports suggest that Asians require lower therapeutic dose ranges of neuroleptics, tricyclic antidepressants, benzodiazepines and lithium, and may be more susceptible to side effects. Asians appear to metabolize tricyclic antidepressants and benzodiazepines at a slower rate than Caucasians.

Asians were also found to be more sensitive to antipsychotic-induced adverse effects such as extrapyramidal symptoms.

Approximately 50% of East Asians (e.g., Japanese and Chinese) lack the active form of aldehyde dehydrogenase because of a single amino acid substitution. This enzyme deficiency has been demonstrated to be responsible for the "flushing" response (facial flushing, palpitations, tachychardia, dysphoria, nausea, vomiting) that many Asians experience after the intake of even a small amount of alcohol. The flushing response has been shown to be the result of accumulation of acetaldehye, a highly toxic substance, which cannot be eliminated efficiently with the deficiency of aldehye dehydrogenase. Additionally, 85% to 90% of Asians also possess an atypical alcohol dehydrogenase isozyme that has a greater capacity to convert alcohol into acetaldehyde.

Implications for Kaiser Permanente Care Providers

Mental health services for Asians and Pacific Islanders attain high levels of cultural competency by incorporating:

- A cultural historical context that includes an understanding of the immigrant, refugee and acculturation and minority experience;
- An understanding of the collective Asian identity premised on community and the family;
- A consideration of spirituality;
- A recognition of the stressors present in a social milieu which may include discrimination.

For example, focusing on individual achievement or personal growth without reference to the family context can increase the guilt and defensiveness of the Asian patient, for whom being self-centered and selfish may be culturally inappropriate. Treatment efforts may need to include the family system in which the patient has an integral role.

Similarly, re-labeling what people do in positive ways that allows "face saving" is a culturally consonant way of encouraging insight and effecting change since loss of face (threat or loss of one's social integrity) is a key dynamic in Asian social relations. This is particularly true when the relationship involves help-seeking or focuses on stigmatized problems such as mental disorders.

It has been shown that therapies that focus on external stress (versus internal conflicts), emphasize direct problem-solving techniques, suggest active problem management (versus problem discussion), offer external resolution (versus internal resolution) may be appropriate with API patients. Additionally, indirect styles of communication may be particularly suitable for API patients who are socialized in the art of deflection and in avoidance of direct conflict.

Until a true multicultural clinical model and perspective is developed and operationalized, there will always be some tension between attributing too much or too little of an individual's behavior to culture. The provider of mental health services needs to maintain a healthy balance of looking for but not explaining all attitudes and behaviors as products of culture. This is essential in the avoidance of stereotypes, such as the myth of the Asian "model minority" which may lead the clinician to miss a key problem that they assume is "not typical" of APIs.

CONCLUSION

he Asian and Pacific Islander population is a healthy population in comparison to the general population. Nonetheless, their health care provides unique challenges for health care professionals. Two particular challenges are evident:

- The need to help address the barriers to health care access and preventive care that make it difficult for some segments of the API population, notably Southeast Asians and some Pacific Islanders, to achieve optimum levels of good health;
- The need to stem or turn back the undesirable acculturation changes in diet and lifestyle that increase the prevalence of chronic disease in API immigrants and later generations.

The time-honored health beliefs and practices of Asians and Pacific Islanders have much to teach western medicine and our health professionals have only to gain by listening to their API patients with sensitive ears and open minds, working to negotiate treatment plans that synthesize the best of both cultural perspectives.

Language barriers will need to be breached and, fortunately, there are good and systematic ways to do this. In several parts of California particularly, teams are working to develop systems of interpretation and translation that will effectively reduce communication problems that arise when patients and providers speak different languages.

In the years ahead, the epidemiological data on the API population, now uneven and scarce, will grow more plentiful and refined, and we will have better guideposts than this first attempt at making clear the health care needs of the several groups that are called Asians and Pacific Islanders. Hopefully, we will soon not need this ethnic gloss, but will have fuller pictures of each unique group so that we can appropriately address the specific needs of local populations.

It is hoped that our health practitioners will use this handbook as a jumping-off point for further exploration. Consult with your API colleagues, explore and learn more about the unique API communities where you live and practice.

RESOURCES

The following are national resources that may assist the health care provider and/or the patient. Check with your local Kaiser Permanente Health Education Department for additional materials, videos and local resources. Appearance of a web site link or resource does not necessarily imply endorsement by the National Diversity Department or by Kaiser Permanente.

Services	Phone	Web Site
Diabetes		
National Diabetes Information		http://www.niddk.nih.gov/
Clearinghouse provides health		health/diabetes/pubs/asianam/
information on diabetes among		asianam.htm
diverse API groups.		
Domestic Violence		
Center for the Prevention of	206-634-1903	http://www.cpsdv.org/Store/
Sexual and Domestic Violence	Fax:	detail-asian-language-
provides educational resources	206-634-0115	resources.htm
addressing sexual and domestic		
violence issues. Brochures in various		
Asian languages are available for		
purchase.		
General Health Issues		
Asian American Health, a National		http://asianamericanhealth.
Institute of Health sponsored web		nlm.nih.gov/
site, addresses the health issues of		<u></u>
Asian Americans.		
Chinese American Medical		http://www.camsociety.org/
Society provides clinical information		issues/issues.htm
on a wide variety of health issues for		155 de 5/155 de 5.11111
the Chinese American patient.		
Medline Plus: Asian American		http://www.nlm.nih.gov/
Health addresses current scientific		medlineplus/
findings on a wide variety of health		asianamericanhealth.html
issues affecting API individuals.		asianiameneanneann.num
Hepatitis B		
Asian Liver Center		http://liver.stanford.edu/
The Asian Liver Center at Stanford		This site is available in English,
University is the only non-profit		Chinese and Korean.
organization in the United States that		Chinese and Rolean.
addresses the high incidence of		
hepatitis B and liver cancer in Asians and Asian Americans.		
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litigation, public education and public policy. Mental Health National Asian American Pacific Islander Mental Health Association's goal is to enhance collection of appropriate and accurate data, identify current best practices and service models.	Fax:	http://www.naapimha.org/
litigation, public education and public policy. Mental Health National Asian American Pacific Islander Mental Health Association's goal is to enhance collection of appropriate and accurate data, identify current best practices and service models. Women's Health	Fax: 303-298-8180	
litigation, public education and public policy. Mental Health National Asian American Pacific Islander Mental Health Association's goal is to enhance collection of appropriate and accurate data, identify current best practices and service models. Women's Health National Asian Woman's Health	Fax:	http://www.naapimha.org/
litigation, public education and public policy. Mental Health National Asian American Pacific Islander Mental Health Association's goal is to enhance collection of appropriate and accurate data, identify current best practices and service models. Women's Health National Asian Woman's Health Organization provides health	Fax: 303-298-8180 415-989-9747 Fax:	
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