Health and Health Care of

Asian Indian American Older Adults

http://geriatrics.stanford.edu/ethnomed/asian_indian

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STANFORD SCHOOL OF MEDICINE

eCampus Geriatrics
IN THE DIVISION OF GENERAL INTERNAL MEDICINE
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CONTENTS

DESCRIPTION

This module reviews issues in health care for Asian Indian American older adults living in the U.S. In addition to suggestions for understanding and caring for older adults of Asian Indian origin, information on demographics, historical periods of migration, and special health risks are included.

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MODULE CHARACTERISTICS

Time to Complete: 1 hr, 20 mins

Intended Audience: Doctors, Nurses, Social Workers, Psychologists, Chaplains, Pharmacists, OT, PT, MT, MFT and all other clinicians caring for older adults.

Peer-Reviewed: Yes

Note

Information for the content in this module does not include citations for individual sections. Much of it is taken from the sources in the reference list.

LEARNING OBJECTIVES

After completing this module, learners should be able to:

1. Explain major traditional health beliefs among individuals from Asian Indian backgrounds.
2. List 5 practical considerations Western providers should take into account in clinical assessment of Asian Indian American older adults.
3. List the top 5 causes of death for Asian Indian, and how they might be affected by culturally appropriate prevention programs.
4. Discuss appropriate approaches in dealing with advance directives and end-of-life care with Asian Indian older adults and their families.

INTRODUCTION AND OVERVIEW

Demographics

According to the 2000 census, there are over 1.6 million people of Asian-Indian origin in the United States. Asian Indians began immigrating to the U.S. as early as the 16th century along with traders from countries like China, Japan, Korea, and the Philippines (Internet source "https:/.../deomi/Observances%20&%20 Demographics/ Ethnic%20Observances/Asian%20 Pacific/ap99.pdf" accessed on 11-4-05).

Since those early days, Asian Indians have immigrated to the United States in waves though the pace of the immigration has been regulated by various changes in the immigration rules in the past four centuries. In the last two decades, large numbers of young and highly-educated Asian Indians have immigrated to the U.S. to work in the high-technology industry. Due to family reunification laws, the numbers of Asian Indian older adults who followed their offspring to this country has also risen.

Between 1980 and 1990, the population of Asian Indians in the U.S. increased by 125%. In the 1990 Census data, there were approximately 23,000 Asian Indian older adults over the age of 65; 83% are foreign born and 51% do not speak English very well. (Divan, 2003) Only 12%, however are classified as linguistically isolated (without an adult who speaks English in the household—the smallest of any Asian ethnic group.

There are now two groups of Asian Indian older adults:

- those who came to the U.S. in the late 1960s and early 1970s
- those who came much later

Asian Indians constitute 18% of the Asians alone residing in the U.S. as of the year 2004, second to the Chinese community and around 4.5% of them are 65 years or older (http://www.census.gov/ prod/2007pubs/acs-05.pdf).

FAST FACTS

- As of 2000, there are over 1.6 million people of Asian Indian origin in the US.
- Asian Indians are second to the Chinese community in terms of Asians residing in the US as of 2004.
- 4.5 % of Asian Indian Americans are 65 years or older.

Patterns of Immigration

Asian Indians have been in the United States as early as 1790. The Alienation of Land Act in India under British rule, which prohibited certain non-farming castes from owning agricultural land, prompted 3000 people to move to West Coast of the U.S. in 1908. In 1946, legislation gave Asian Indians the right to become American citizens and bring relatives to the U.S., but the annual quota was small.

The population did not grow significantly until passage of the Immigration and Naturalization Act of 1965, which opened the doors for individuals of certain professional or educational backgrounds. Hence, the 1960s cohort of Asian Indians who immigrated to the United States was a very highly educated and skilled group. Thereafter, laws were passed that allowed families to be reunited, and the Asian Indian population grew steadily through the 1970s and 1980s until a second spurt in the 1990s, heralded by the information technology boom. Older adults continue to come to the U.S. as "followers of children". Between 1989 and 1992, for example, almost 14,000 individuals aged 60 and over immigrated to the U.S. from India.

(INTRODUCTION AND OVERVIEW CONT'D)

There are two distinct groups of Asian Indian older adults in the United States:

1. **Adults who immigrated to the U.S. and live here and become older adults:** This group consists of the professionals and their nuclear families who immigrated to this country in the 1950s and 1970s. Their acculturation trajectory is very different from that of the first group as these subjects have lived in the U.S. for decades and been a part of the American work force. They are typically highly-educated professionals and are well-acculturated into the American culture.

2. **Older adult immigrants:** This group consists of the parents or grandparents who immigrated to the U.S. to be reunited with their adult children and to spend their old age in the care of their children. This cohort has typically spent their entire life in India and are not acculturated to the main stream American culture.

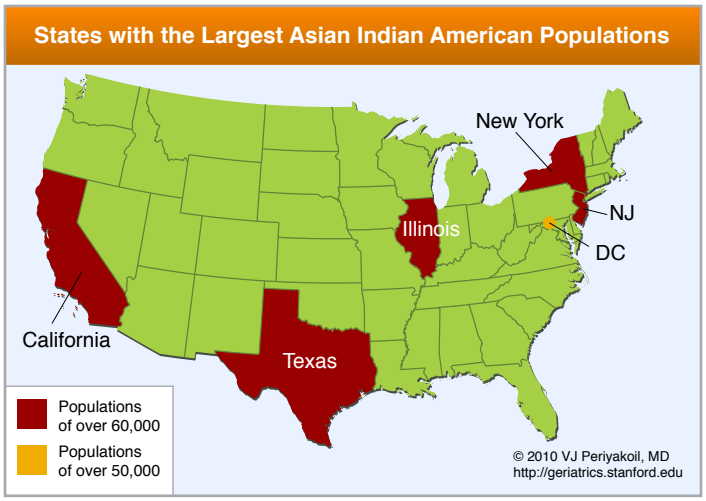
The two groups differ greatly demographically and face different issues. The former tend to be more acculturated, affluent, and independent. Those in the latter group are at high risk of being isolated and lonely (language barriers, lack of independent transportation), lack health benefits, depend on their children or family, and suffer from culture shock. Given their degree of acculturation, this group's communication skills, decision-making patterns, clinical adherence patterns, dietary habits are likely to differ significantly from those of the older adults who immigrate to the U.S. post retirement, to be reunited with their adult children.

Geographic Concentrations

Asian Indians cohorts can be found in every state of the United States, though large concentrations can be found in California, Texas, New York, New Jersey and Illinois (populations of over 60,000) followed by the Washington D. C. Metropolitan area with a population of over 50,000 (*see the map to the right*).

LANGUAGES SPOKEN IN INDIA

Hindi (by 40% of the population) Gujarati, Punjabi, Bengali, Urdu, Marathi, Oriya, Kannada, Tamil, Telugu, Malayalam, English



Language and Culture

Preferred Cultural Terms

The preferred term for Americans with roots in India is Asian Indian. Within the Asian Indians the Hindi term *Desi* (meaning "from our country") is used to indicate persons of Asian Indian origin.

Language and Literacy

While there are more than three hundred languages and dialects spoken in India, Hindi, the national language is spoken by over 40% of the population. Some of the other languages that are spoken are Gujarati, Punjabi, Bengali, Urdu, Marathi, Oriya, Kannada, Tamil, Telugu, and Malayalam. However, English is becoming a popular second language. Older Indian immigrants may not speak English and may need a translator for health care transactions.

(INTRODUCTION AND OVERVIEW CONT'D)

Most Asian Indian immigrants are well-educated and many are well-qualified professionals:

- 85% are high school graduates
- more than 65% have college degrees
- 43% have graduate or professional degrees

Degree of Acculturation

According to the most recent census, approximately 1.7 million Asian Indians live in the United States—80% being Hindus. An estimated 66,834 older Asian Indian adults live in the United States, most of whom are foreign born with an estimated 48,000 Hindu immigrant older adults.

Two Groups of Older Hindu Immigrants

The older Hindu immigrant population can be categorized into two major groups:

1. Those that immigrated around 1965 and have since settled in the United States.
2. Those who have come to live with their adult children who have immigrated to the United States.

Place in the Family

In traditional Asian Indian society, extended family members usually live together as a single-family unit. Most elderly parents join their grown-up children in the U.S. for providing antenatal, postnatal care, as well as childcare. Often, the husband's parents will join the family after they have retired or when help is needed. The grandparents' role in raising the children is highly respected, and they form the linkage to the Asian Indian culture, religion, and heritage.

> **"Hinduism's philosophical core is rooted for the most part in the three fundamental Hindu scriptures: the *Vedas*, the *Upanishads*, and the *Bhagvad Gita*."**

Dependence on Children

Older Asian Indian immigrants are often financially dependent on their children. They face the challenges of a culturally different society, such as:

- a language barrier
- culture mismatch
- new lifestyle factors
- role-reversal

Religion & Indian Philosophy

The majority of Asian Indians practice the Hinduism. The other major regions are Sikhism, Buddhism, Jainism, Christianity, and Islam; a small percentage of the population practice Judaism, Zoroastrianism, and Baha'I' Faith.

Hinduism

About 900 million of the 6.5 billion world population are Hindus, making Hinduism the fourth-largest religion in the world. Most Hindus living in the United States are of Asian Indian origin. About 80% of Asian Indian immigrants practice Hinduism.

The U.S. Hindu population is growing rapidly, from an estimated 227,000 in 1990 to an estimated 766,000 in 2001. Current estimates range from 1.1 to 1.5 million. Most U.S. Hindus are either first-, second-, or third-generation immigrants with their religious and cultural practices of Hinduism greatly influenced by their country of origin (*see Table 1*) and their level of acculturation.

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(INTRODUCTION AND OVERVIEW CONT'D)

Table 1 Hinduism by Country of Origin

Country	Estimate of Total Population, Hindu and non-Hindu	Percentage Hindu
India	1.3 billion[a]	80.5%
Nepal*	28,287,147[a]	80.6%
Bangladesh	147,365,352[b]	16%
UK	60,609,153[b]	1%
Mauritius	1,240,827[b]	48%
Sri Lanka	20,222,240[a]	7.1%

*Only official Hindu State in the world

a 2001 census b July 2006 estimate

Source: https://cia.gov/cia/publications/factbook/geos/xx.html (accessed April 2007).

The correct name of this ancient religion is *Sanatana Dharma*, which means "eternal law" in Sanskrit. Also known as, the *Hindu Dharma*, Hinduism is one of the oldest organized religions in the world, tracing its roots back to 5000 BC. It originated in the Indian subcontinent on the banks of the Sindhu river (now Indus river) and was practiced by the Sindus (people who lived on the banks of the Sindhu), who were later known to the Greeks as *Sindhus* and finally as *Hindus* (a Persian word).

In contrast to some of the other organized religions, Hinduism can be more aptly described as a philosophy or way of life that has been subject to numerous interpretations over several millennia, now resulting in a religious practice that incorporates a remarkable diversity of cultural rituals and customs. Hinduism's philosophical core is rooted for the most part in the three fundamental Hindu scriptures: the *Vedas*, the *Upanishads*, and the *Bhagvad Gita*. Since Hinduism's inception over 5000 years ago, countless interpretations and reinterpretations of the sacred texts have obscured the line between religion and cultural practice. However, the philosophical tenets have remained remarkably constant.

TOP: 18th/19th Century painting depicting Krishna and Arjuna at Kurukshetra—a scene from the Bhagvad Gita.
Source: http:/en.wikipedia.org/wiki/Bhagvad_Gita. Public Domain.
BOTTOM: Hindu Temple in India.

The pursuit and practice of the Hindu *dharma* is governed by a belief in *karma* (from the Sanskrit root *kri* meaning "action")—the concept that every action leaves an imprint on one's *Atman* (soul or spirit).

(INTRODUCTION AND OVERVIEW CONT'D)

Karma is determined by a universal law (or order) in which good actions produce good results and bad actions produce bad results. Karmic theory greatly influences the patient's world view of health, death, and dying and of the Hindu's explanatory model of illness.

Many Hindus may believe that pain and suffering (both physical and psychosocial) are the result of bad karma and not of medical or mental illness.

Many older and more traditional Hindu adults may believe their illness is caused by bad karma from a past life or by past actions in this lifetime, and they may not entirely believe in the organic etiology propounded by Western biomedicine. As a result, an illness may be viewed as something to be accepted and endured rather than fixed or cured. In some situations, these beliefs may induce a quiet fatalism that can result in therapeutic non-adherence.

Buddhism

Buddhism is an ancient Asian Indian religion founded by Siddhartha Gautama Buddha. Gautama was a Hindu Prince of Kapilavatsu, India who was deeply disturbed by the experiences of worldly suffering. He gave up his royal life and became an ascetic. After years of meditation, he attained *bodhi* (enlightenment) when sitting under the Bodhi tree in Gaya, India. Buddhism adheres to *ahimsa* (non-violence) and advocates for giving up worldly desire in order to attain *nirvana* (salvation).

The Four Noble Truths

The Four Noble Truths were taught by Gautama Buddha after attaining nirvana and are thought to be the essence of Buddhism:

1. Life leads to suffering (*dukkha*).
2. Suffering is caused by desire (*kama*).
3. Suffering ends when a person gives up desire and enables attainment of the liberated state of bodhi (Enlightment).
4. Reaching this liberated state is achieved by following the **eightfold path** laid out by the Buddha.

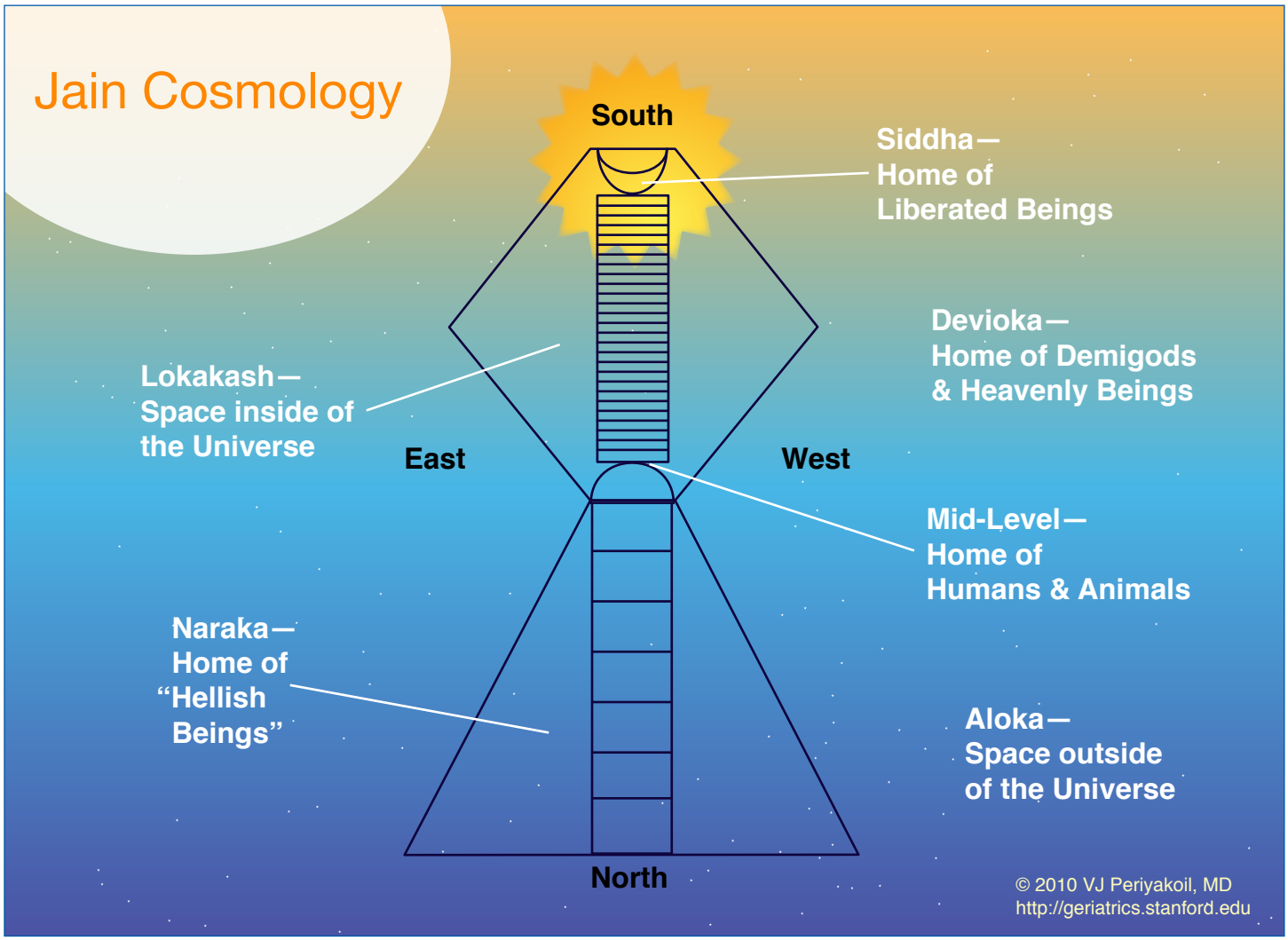
The Noble Eightfold Path

The Noble Eightfold Path is a way to attain *prajña* (consciousness) and thereby nirvana (liberation):

1. ***dṛṣṭi* (Sanskrit for *sight*):** viewing reality as it is, not just as it appears to be.
2. ***saṃkalpa* (*intention*):** intention of renunciation, freedom and harmlessness.
3. ***Vāca* (Sanskrit for *speech*):** speaking in a truthful and non-hurtful way.
4. ***Karma* (Sanskrit for *actions*):** acting in a non-harmful way.
5. ***ājīvana*:** a non-harmful livelihood.
6. ***vyāyāma* (Sanskrit for *effort*):** making an effort to improve.
7. ***smṛti* (स्मृति Sanskrit for "that which is remembered"):** self-awareness and mindfulness with equanimity.
8. ***samādhi* (समाधि Sanskrit for state of consciousness):** a temporary liberated state attained by *dyāna* (meditation) (Nirvana is a *permanent* state of liberation).

Buddhism is one of the largest religions in the world. Many Asian Indians are Buddhists. As Buddhism is derived from Hinduism, many of the Hindu tenets like karma, ahimsa and the concept of rebirth are followed in Buddhism. Most Buddhists are vegetarians.

(INTRODUCTION AND OVERVIEW CONT'D)



Jainism

Jainism (*Samana Drarma*) is an ancient Asian Indian religion derived from Hinduism. Jains believe in the wheel of time which revolves. During every upward *utsarpini* (upward) and *avasarpini* (downward) motion of this wheel of time, 24 *Tirthankars* (pathfinders or prophets) are thought to be reborn to propagate the eternal truth and help human being attain salvation.

According to Jainism, every living being has a soul. Every soul is potentially divine, with innate qualities of infinite knowledge, perception, power, and bliss (masked by its karma and desires). The present cycle, thought to be a downward swing, has 24 Tirthankars, the first of which was Rishabhdev. The son of King Nabhi Raja and Queen Marudevi, Rishabh taught people farming, animal husbandry and cooking. Vardhaman Mahavira is considered tobe the 24th Tirthankar for this cycle of time. Vardhaman Mahavir was a prince-turned-ascetic who lived 2,600 years ago and was a contemporary of Gautam Buddha and is mistakenly thought to be the founder of Jainism.

The three gems of Jainism—Right Faith, Right Knowledge and Right Conduct provide the path to salvation. Jains believe that there is no supreme divine creator. The universe is thought to be self-regulated and every soul has the potential to achieve divine consciousness (*siddha*) through its own efforts.

(INTRODUCTION AND OVERVIEW CONT'D)

> **"The three gems of Jainism—Right Faith, Right Knowledge and Right Conduct provide the path to salvation."**

Attaining Enlightenment

Jains believe that to attain enlightenment and ultimately liberation, one must practice the following ethical principles:

1. ***Ahimsa* (non-violence)**—to cause no harm to living beings. This is the fundamental vow from which all other vows stem. It involves avoiding intentional and unintentional harm to any other living creature.
2. ***Satya* (truthfulness)**—to always speak the truth. Given that non-violence has priority, all other principles yield to it, whenever there is a conflict. For example, if speaking truth will lead to harm of violence, it is perfectly ethical to be silent. Thus Jains may practice non-disclosure and practice the concept of protective truthfulness.
3. ***Asteya* (non-stealing)**—to not take anything that is not willingly given.

Dietary Practices

Traditional Jains don't normally eat or drink anything after sundown because it is believed that this can cause the death of microorganisms that emerge in the dark. The Jain lifestyle is geared towards causing least harm to other creatures and the environment. Jains are vegetarians. They do not eat onions and garlic (as these are thought to increase sexual desires). Jains also do not eat any roots and tubers like potatoes and carrots because uprooting the plant leads to the death of the plant. Additionally, uprooting the plant may result in the death of smaller underground insects and microbes.

Fasting

Many traditional Jains (especially women) undertake fasting. **There are four common types of fasting:**

1. ***Vruti Sankshepa***—limiting the number of items of food eaten.
2. ***Rasa Parityaga***—giving up favorite foods
3. ***Partial fasting***—eating just enough food to avoid hunger.
4. ***Total fasting***—giving up food and water completely for a short period.

Fasting to death (*Santhara* or *Sallenkhana*)

Santhara or *Sallenkhana* is a procedure in which a Jain voluntarily stops eating and drinking with the intention of dying. In addition to voluntary cessation of eating and drinking, the practitioner of santhara also has to abandon desires (kama) and meditate as they peacefully await death which is thought to liberate their body from worldly ties and free the Atman imprisoned within.

Jain older adults may opt to undertake santhara at the end-of-life, and they are revered by fellow Jains. Santhara deaths may even be celebrated publicly with friends and family showering praise on and paying homage to them. Some families may even place a full-page announcement of the event in newspapers.

It is to be noted that santhara is thought to be distinct from suicide. In santhara, the person stops eating and drinking and meditates constantly praying for liberation from worldly suffering while allowing nature to take its course and resulting in the death of the body. Suicide, in contrast, is thought to be an act of violence.

PATTERNS OF HEALTH RISK

Culture-Specific Health Risks

Consanguinity

Marrying a first cousin or mother's brother is not an uncommon practice in olden India. Marrying the offspring of a mother's brother or a father's sister is an acceptable traditional practice in some Hindu families, but marrying the offspring of a mother's sister or a father's brother is not.

In Muslim Asian Indians, marrying the offspring of a mother's sister or a father's brother is acceptable but marrying the offspring of a mother's brother or a father's sister is an not acceptable. Although this practice is falling out of favor as the medical risks associated with consanguinity are better understood, older Asian Indians may be offspring of a consanguineous marriage. There is increased risk of developmental anomalies and common autosomal recessive disorders.

Common disorders occurring in the Indian subcontinent are:

- Sickle-cell anemia
- thalassemia
- cleft lip and palate
- limb and gut malformations
- neural tube defects (Ahmed et al., 2002).

Dietary Practices

Rice remains a dietary staple for Hindus from Southern India, and wheat for those from Northern India. Many older Hindus are vegetarians or vegans. Chicken, mutton (lamb), and fish are consumed by Hindus who are not vegetarians. Traditional Hindus rarely eat beef. Traditional Muslims rarely eat pork. As gelatin is manufactured by processing the collagen in cow or pig bones, hooves, and connective tissues, traditional Asian Indians (especially Hindus) may refrain from eating gelatin based products like jello, certain yoghurt which are stabilized using gelatin and marshmallow.

As oranges are thought to be "cold foods" Asian Indians may avoid orange juice when they have a cold of flu like symptoms. This is contrary to the Western biomedicine recommendations of drinking orange juice as it has high Vitamin C content when inflicted with a cold or flu.

> **"Many older Hindus are vegetarians or vegans…chicken, mutton (lamb), and fish are consumed by Hindus who are not vegetarians."**

(PATTERNS OF HEALTH RISK CONT'D)

Muslims will consume halal yoghurt and other halal meats. Similar to kosher, *halal* denotes foods that are religiously acceptable according to Islam. In extreme cases, some traditional Asian Indians may even refuse porcine insulin and bovine insulin, though these instances are extremely uncommon. Globalization and acculturation to American ways have had a strong influence on Asian Indian dietary habits.

Fasting

Fasting frequently is a common practice among older women and vegetarians. It is done because of a religious belief that it improves the welfare of the family. Health providers should inquire about these practices and help the patient practice their religious customs with while being working with them to mitigate adverse effects on their health. A balanced approach towards nutrition should be taught based on the cultural diet of the patient.

Hot vs. Cold

Like in other Asian cultures, foods including vegetables are classified as being either "hot" or "cold" based on the ways they change the body (Ramakrishna & Weiss, 1992).

Vegetarianism and High Fat Intake

The vegetarian diet is rich in carbohydrates, poor in protein, and often deficient in calcium. Thus, older adults are at risk of nutritional deficiency and osteoporosis. The typical Asian Indian diet averages 56% of energy intake from carbohydrates, 32% from total fat and 8% from saturated fat. The high fat intake is associated with obesity and low leisure time activity.

> **"Fasting frequently is a common practice among older women and vegetarians."**

LEFT: Display of the items used in a paan chewing session, often the cause of sub mucosal fibrosis. The betel leaves are toward the bottom center and folded. The upper left shows slices of the dry areca nut, while the upper right displays slices of the tender areca nut. A pouch of tobacco is shown on the far right; tobacco is a recent introduction to the chewing of paan. **Source:** http://en.wikipedia.org/wiki/Paan. Public Domain. **RIGHT:** Close-up of a betel leaf.

Betel and Tabacco Use

Older Hindus may consume betel leaves (Piper betel Linn). Betel leaves, which are the main ingredients in *paan* or *tambool* that Hindus chew, are thought to be carminatives with antiflatulent and anti-inflammatory effects. In Ayurvedic medicine, betel leaves are used as an aphrodisiac. Many chew non-smoking tobacco and areca nut with betel leaves, which puts them at risk of oral submucous fibrosis, and therefore oral cancer (Ahluwalia, 2005).

Oral Submucous Fibrosis

Oral submucous fibrosis (OSMF) is associated with progressive juxtaepithelial fibrosis of the oral mucosa, the oropharynx, and rarely, the larynx.

It may manifest as discoloration, loss of suppleness and even ulceration of the oral mucosa. The patient may report trismus, burning sensation in the mouth at rest with exacerbation during eating or drinking, reduced mobility of the tongue, altered taste and inability to eat the traditional Asian Indian diet, including hot and spicy foods.

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(PATTERNS OF HEALTH RISK CONT'D)

OSMF is typically caused by the common Asian Indian habit of chewing *paan masala*. Paan is a mixture of spices including, Areca catechu (areca palm or areca nut palm), betel leaves (Piper betle) belonging to the Piperaceae family, menthol, cardamom, calcium hydroxide (lime) and optionally chewing tobacco. The areca nut contains the alkaloid arecoline, which promotes salivation (the saliva, gums and teeth are stained red). It is thought to aid digestion, freshen the breath and also have aphrodisiac properties. Chewing paan is a social activity and has both ceremonial and symbolic value in the Asian Indian culture.

Arecoline, an active alkaloid found in betel nuts, stimulates fibroblasts to increase production of collagen. Paan chewing causes a juxtaepithelial inflammatory reaction in the oral mucosa eventually resulting in submucous fibrosis. OSMF is a pre-cancerous condition. Paan is one cause for the increased incidence of oral cancer in South Asia (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2486725/pdf/bullwho000417-0150.pdf).

Diabetes

Asian Indians, in particular immigrants, are at high risk of insulin resistance leading to diabetes mellitus type II, and dyslipidemia, which causes increased visceral adipose tissue and eventually coronary artery disease (CAD) (Petersen et al., 2006; Abate, 2007).

Several factors have been attributed to this increased incidence:

- ethnic predisposition,
- diet and
- exercise.

This is further aided by the belief of the older Hindu generation that the *Ghee* (pronounced "g "), or clarified butter, strengthens the body and promotes good health.

Lactose Intolerance

Lactose intolerance is very common in older Asian Indians. The incidence of lactose intolerance is more common in the Southern Indian population (66%) than those in Northern part of India (27%) (Tandon et al., 1981).

Other Health Problems

Other health problems of considerable importance among Asian-Indians immigrants include:

- Cardiovascular disease
- Hypertension
- Diabetes mellitus, Type 2 per se, or as a part of Syndrome X
- Nutritional deficits
- Tuberculosis (multi-drug resistant variety is not uncommon)
- Malaria—choloroquin resistant P.falciparum
- Filariasis (Wuchereria bancrofti infection)
- Protozoal—Amebiasis (intestinal and liver)—E. histolytica and Giardiasis (G. lamblia)
- Other parasitic infestations
- Hepatitis A
- Dental caries and periodontal disease
- Sickle-cell disease in selected populations

Cardiovascular Disease

Immigrant Asian Indian men in the U.S. have a high prevalence of coronary heart disease, non insulin-dependent diabetes, lower high-density-lipoprotein (HDL) cholesterol levels and hypertriglyceridemia. All these have "insulin resistance" as a common pathogenetic mechanism, which seems to be the most important risk factor. The prevalence of coronary artery disease (CAD) is three times higher in immigrant Asian Indian women compared to Caucasian women.

Diabetes Mellitus

Abate and Chandalia (2006) have compressive reviewed on increasing prevalence of type 2 diabetes and insulin resistance in South Asian Immigrants (Asian Indians). Major contributing factors were found to be urbanization and westernization that include life style factors (dietary practices and inadequate physical

(PATTERNS OF HEALTH RISK CONT'D)

activity). In addition, current evidence points towards genetic variants (e.g., ENPP1 121Q) as one susceptibility factors (Abate and Chandalia, 2006; Petersen et al, 2006)

Musculoskeletal Disorders

Asian women, including Asian Indian women, are at a high risk for osteoporosis. According to the National Osteoporosis Foundation, because of the differences in bone mass and density between these groups Asian and Caucasian women are at higher risk for osteoporosis than African Americans and Hispanics. The musculoskeletal disorder may partly be explained due to widespread prevalence of Vitamin D deficiency in the South Asian population.

Vitamin D Deficiency

There is widespread Vitamin D deficiency (VDD) amongst all age groups in India (Goswami et al., 2008). Similar trend has been found in the immigrant South Asian population in the U.S.

Pain

It has noted in a couple of studies in UK that South Asians immigrants (Indians, Pakistanis, and Bangladeshis) had higher prevalence of widespread pain compared to the Europeans (Palmer et al., 2007; Njobvu, 1999). It was mostly musculoskeletal pain, and was more prevalent in women than in men. In addition, there was more somatization of pain compared to that in the Caucasian population.

Although the reason for this occurrence of pain is not clear, the authors suggest culture could play an important factor, however other explanations were Vitamin D deficiency, the level of acculturation, gender, communication barriers (language) or ethnicity of the provider (Palmer, 2007). Elderly patients may be stoic in expression of pain. It is important to observe non-verbal behavior.

Dementia

According to recent studies conducted in Asian Indians, the prevalence of dementia is lower compared to that of developed nations. These studies show that prevalence of dementia varies in different region of the country:

- **in urban regions** it varied from 18 per 1000(1.8%) (Vas et al, 2001) to 33.6 per 1000 (3.36%) (Shaji, 2005).
- **in rural areas** it was found to be 1.36% to 3.5%. The predominant type of dementia prevalent is Alzheimer's type, with the next being vascular dementia.

The prevalence of Alzheimer's disease is very low in India, but the predilection to diabetes and coronary artery disease increases the risk of multi-infarct dementia.

Lower Prevalence of Dementia in Asian Indians

The overall prevalence of dementia in developed countries has been reported to be between 5% and 10% after 60 or 65 years and older (Biswas A, Chakraborty D, Dutt A, et al, 2005). In contrast, the reported prevalence of dementia in Asian Indian older adults is much lower (Shaji S, Bose S, Verghese A., 2005).

Lower life expectancies, under diagnosis, false negatives are thought to be contributing reasons. However, it cannot be denied that the decreased prevalence could also be due to decreased genetic risks and also possible dietary and environmental factors.

Curcumin and Dementia in Asian Indians


Tumeric

Recent research has focused on the possible protective effects of curcumin in dementia. Curcumin (Diferuloylmethane) is the active ingredient found in turmeric, a key ingredient in Indian curry (*see photo above*). Curcumin has anti-inflammatory and anti-oxidative properties and is thought to suppress oxidative

(PATTERNS OF HEALTH RISK CONT'D)

damage, inflammation, cognitive deficits, and amyloid accumulation in the aging brain, thus serving as a protective factor in dementia (Yang F, Lim GP, Begum, 2004).

Assessment of Dementia

Culturally sensitive interviews of the patient and family member and clinical assessment are the most important diagnostic tools for dementia. A comprehensive history and physical examination with special attention to the onset and rate of progress of cognitive problems, a laboratory evaluation to rule out hypothyroidism (TSH), syphilis (VDRL), B12 deficiency are recommended. Brain imaging studies should be considered in patients if:

1. dementia onset occurs at an age below 65 years;
2. presence of focal neurologic deficits; and
3. the clinical picture suggests normal-pressure hydrocephalus (triad of onset has occurred within 1 year, gait disorder and unexplained incontinence).

Disclosure of Diagnosis

Once the health care professional has made the diagnosis of dementia, it is of critical importance to disclose the news about the diagnosis in a culturally competent and compassionate manner. As in many other Eastern cultures, the autonomy unit of an Asian Indian family many consist of the patient and one or more key family members. Acculturated elders who have embraced (American) main stream values may prefer to make their own decisions.

Others may still defer to key family members to make all health care decisions for them. In certain cases, families may request that the patient not be told of the diagnosis of dementia. In such cases, the health professional should first check in with the patient and ascertain their wishes.

For example saying "*Mrs. Reddy, I understand that you would prefer that I not discuss your illness with you and that you would prefer to have your husband/son/daughter make health care decisions for you. Is this true?*" … "*Ok, I will have further discussions with your husband/son/daughter. But if you ever need any information about your health status or have any questions, please feel free to ask me.*"

INTERNET RESOURCE: DEMENTIA SCREEN

Systematically translated versions of the commonly used dementia screen, the **Mini Mental Status Exam**, are available in Hindi, Gujarati, Marathi, Kannada, Telugu and Malayalam Indian dialects. These are available at:

http://www.minimental.com

Management of Dementia

At present, there is no curative therapy for dementia. Thus, the primary treatment goals for patients with dementia are to enhance and preserve quality of life and optimize functional performance by improving cognition, mood, and behavior.

- Both pharmacologic (donepezil, galantamine, rivastigmine and memantine) and nonpharmacologic treatments (light therapy, reminiscence therapy, etc.) should be considered.
- Choline esterase inhibitors (donepezil, galantamine and rivastigmine) slow down the progress of the disease.
- Memantine, an-methyl-d-aspartate receptor antagonist, recently approved by the FDA is indicated in moderate to severe dementia.
- In addition, modifiable risk factors like hypertension and dyslipidemia should be carefully treated.
- Co-morbid conditions like coronary vascular disease and diabetes should be carefully managed.
- Establishing a therapeutic alliance with both the patient and the family fosters an ongoing trusting relationship and facilitates management.
- Proactive education of the patient (in the early stages of dementia) and caregiver is helpful.

(PATTERNS OF HEALTH RISK CONT'D)

Caregiver Stress

Dementia caregivers are often subject to enormous and cumulative stresses. In fact 80 percent of dementia caregivers report stress, and about 50 percent report depression (Small, 1997).

Health professionals caring for dementia patients should:

- Monitor the patient's caregiver(s) for signs of caregiver stress.
- Make appropriate referrals to caregiver support groups as these have been shown to effectively alleviate stress.
- Consider offering support services like respite care and other community resources like dementia adult day care as these interventions reduce care-giver stress, offer meaningful social stimulation to the patient and may possibly help postpone patient institutionalization.

Interacting with Reluctant Caregivers

While some Asian Indian caregivers may be open and vocal about the stresses experienced, others (especially elderly wives) may feel reluctant to voice their stresses as they may feel such expressions to be demonstrative of a lack of loyalty to their loved ones.

- Gentle and explorative questions will likely elicit the true state of affairs.
- Normalizing their experience: "*Mrs. Rao, often caregivers of dementia patients become very stressed. You are working hard taking care of your husband and I admire you for this. However, you may become tired and exhausted for doing this on a long term basis. This may cause health problems for you in the future. There are some simple things we can do to help with care-giver stress. Can you please tell me what a typical day looks like for you?*"

Nutrient Deficiency

Immigrant South Asian population in the U.S. has increased prevalence of micro and macro nutrient deficiencies due their dietary habits, specifically vegetarianism. It was found that they were mainly deficient in Vitamin D, Vitamin B6, Vitamin B12 and pantothenic acid (Jonnalagadda, 2002; Gupta, 2004). Hyperhomocysteminia has been observed in young Indian immigrant men, wich is associated with vitamin B12 deficiency. According to American Heart Association increased levels of blood homocystine levels has been associated with increased risk of cardiovascular diseases (Carmel et al, 2002).

Cancer

Divan (2003) reviewed the incidence of cancer in Asian Indians residing in the U.S. 61% of South Asian women 40 years and older had a regular breast exam which was nearer to the target goal of 70% by the year Healthy People 2010; and about 73% had a pap test in the last 3 years—which was less than the Healthy People 2000 target of 85%.

A recent study on Asian Indian and Pakistani immigrants in the U.S. shows that cancer incidences vary from those living in their native country.

The three most common cancers in Asian Indian and Pakistani immigrants are:

- prostate cancer (30%)
- lung cancer (10%)
- colorectal cancer (9%)

In women, the three most common are:

- breast cancer (38%)
- genital cancer (15%)
- colorectal cancer (7%)

(Hossain, 2008)

In addition, Asian Indian and Pakistani immigrants have better survival rates compared to Non-Hispanic Whites (Hossain, 2008).

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(PATTERNS OF HEALTH RISK CONT'D)

Table 2 Cancer Risks in South Asians living in the U.S.

Increased Risk	Decreased Risk
Colorectal Cancer—4 times in both males and females	Gall Blader Cancer
Stomach Cancer in females	
Lung and Bronchus—5 times in both males and females	
NHL (Non-Hodgkin's Lymphoma)	

Unique Trends in California

Unique trends as observed by Jain et al (2005) amongst the South Asian population in California:

1. Lower median age at the time of diagnosis—58 years compared to 68 years for other races.
2. As noted in Table 2, the most commonly occurring cancers in the South Asian population in California were quite different from those seen in Indian sub-continent.
3. Incidence/Risk of Cancers in comparison to those living in their native country (India):
   a. Four time of increased risk in developing colorectal cancer in both male and females.
   b. Decrease incidence of gall bladder cancer
   c. Cancer of Stomach increase in South Asian females.
   d. Lung and Bronchus cancer—fivefold increase in females.
   e. NHL: 3–6 time increased risk.
   f. Leukemia.

Cancer Incidence

(http://www.ccrcal.org/PDF/ACS2008.pdf)

According to the California Cancer Registry, the California Department of Public Health, 2002–2004 reports the most common cancers amongst South Asian immigrants.

Breast Cancer

In India only 1 in 40 women gets breast cancer, but in United States, one out of every eight Asian Indian women will get the disease, the highest incidence in the world. According to the American Cancer Society, South Asian women have the second highest incidence of cancer among Asian Pacific Islanders (Hossain, 2003).

Oral Cancer

Chewing of non-smoking tobacco and areca nut is widely prevalent in South Asian immigrants and can lead to oral cancer and pre-cancerous conditions (*see also page 9)* (Changrani, et al, 2006). The Indian subcontinent (India, Pakistan, Bangladesh, and Sri Lanka) accounts for 40 % of the oral cancer diagnosed worldwide (Changrani et al 2006; Ahluwalia, 2005). Consequently, the increasing number of immigrants from the Indian subcontinent with oral cancer poses a threat to U.S. public health (Changrani et al 2006; Ahluwalia, 2005).

Table 3 Incidence of Cancer in South Asian Population in California in the order of incidence

Males	Females
Prostate	Gall Blader Cancer
Colorectal	Colorectal
Lung	Ovary
NHL	Uterus
Bladder	Thyroid

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(PATTERNS OF HEALTH RISK CONT'D)

A pilot study by Changrani et al (2006) on the use of *paan* and *gutka* (*see definitions below*) amongst Asian Indian-Gujarati immigrants and Bangladeshis in New York city showed that either these immigrants continued to use *paan* and *gutka* as they used to or developed the habit after immigration due to easy availability or lesser restrictions from the society. However, there are reports that *paan* and *gutka* use are less prevalent amongst those residing in California, which could be due to their higher educational levels (Jain et al, 2005).

Paan and Gutka: Definitions

Paan is a mixture of spices including, Areca catechu (areca palm or areca nut palm), betel leaves (Piper betle) belonging to the Piperaceae family, menthol, cardamom, calcium hydroxide (lime) and optionally chewing tobacco.

The areca nut contains the alkaloid arecoline, which promotes salivation (the saliva, gums and teeth are stained red). It is thought to aid digestion, freshen the breath and also have aphrodisiac properties. Chewing paan is a social activity and has both ceremonial and symbolic value in the Asian Indian culture.

Gutka (also spelled *gutkha*, *guttkha*, *guthka*) is a powdery, granular light brownish substance made from crushed areca palm nut, tobacco, calcium hydroxide, betel leaf extract and sweet or savory flavoring. When consumed gutkha begins to dissolve in the oral cavity and turn deep red in color. It is a stimulant and has addictive properties.

Common Misconceptions Encountered in Older Asian Adults

(Ramakrishna & Weiss, 1992)

1. The potency of the drug is judged by its external appearance, cost or how well-known it is in the public.
2. Injection are considered powerful interventions and somehow has a placebo effect on the patient even if it is an inert substance.
3. When starting a new medication, many closely monitor their body functions. Thus, any new observation will be attributed to the new medication. This may lead to non-compliance or non-adherence.
4. Older patients may complain about or criticize the extensive diagnostic tests they have to undergo in the U.S., because, different from their home country, many older physicians prescribe medications without any diagnostic tests.

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CULTURALLY-APPROPRIATE GERIATRIC CARE: FUND OF KNOWLEDGE

Common Cultural Beliefs

To care for older adults from Asian Indian backgrounds effectively, it is important for providers to be familiar with their traditional health beliefs and historical experiences that may have influenced their attitudes toward health care. Use of complementary or alternative medicine is quite common in the Indian subcontinent; however, some systems are not indigenous to the country, as some were introduced into the Indian subcontinent by foreign invasion and foreign trade.

Note

Health care providers should be aware of some of the following customs and beliefs, as it would help them provide culturally appropriate care with the caveat that there is tremendous diversity in the Asian Indian Hindu population in the U.S. Older Hindus who immigrated to the United States late in life may still be wedded to traditional Asian Indian healing sciences of Ayurveda and Siddha. It is also important to educate patients about any potential drug-herb interactions if the patient is concurrently using Western medications as well. Clinicians should use a gentle and non-judgmental manner to ask about these healing systems and then document use of herbs or complementary and alternative medications.

Ayurveda

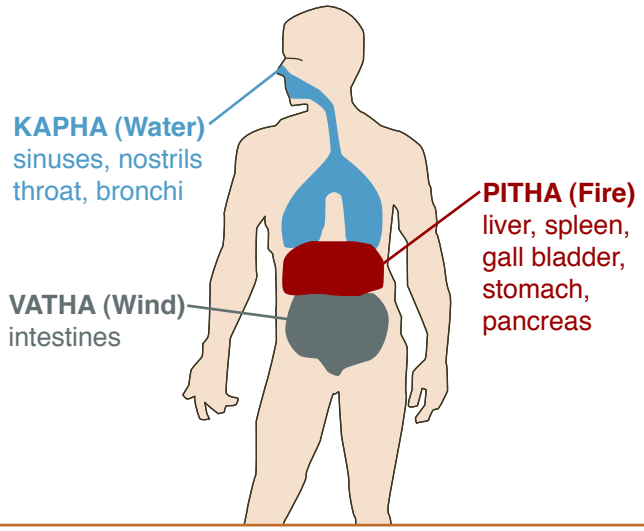
Ayurveda is an ancient and sophisticated healing art that originated in the Indian subcontinent. It is a comprehensive and holistic healing art thought to have been derived from the *Atharveda*, one of the oldest Hindu scriptures. It dates back to 1000 BC and includes both herbal remedies as well as surgical techniques (*salya-chikitsa*) aimed at preserving life (*ayus*) and promoting well-being. (Ayurveda is made up of two Sanskrit words, *Ayu* meaning "life" and *veda* meaning the "knowledge of").

Common Alternative Medicinal Systems

Some of the alternative medicinal systems common in the Asian Indian population are:

- Ayurveda
- Siddha
- Unani
- Tibbi
- Homeopathy
- Naturopathy
- Acupressure

The Three Doshas



Practitioners used mercury- and sulfur-based medications and herbs to treat ailments and emetic herbs to maintain body homeostasis or balance of the *tridosha* (three humoral systems):

- *pitha* (fire)
- *vatha* (wind)
- *kapha* (water)

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(FUND OF KNOWLEDGE CONT'D)

Each Dosha represents certain bodily activity (*see the illustration on the previous page*). The ratio of the doshas varies in each individual.

When any of the doshas becomes accumulated, Ayurveda will suggest specific lifestyle and nutritional guidelines to assist the individual in reducing the dosha that has become excessive.

Unani or Yunani Medicine

Unani Medicine or Yunani Medicine means "Greek" is a form of traditional medicine widely practiced in the Indian subcontinent. Unani science of medicine originates from ancient Greece; it was further adapted by the Arabs and is a popular form of complementary and alternative medicine practiced in India. Unani postulates that the human body is made of the Four Humors:

1. Blood (*Dam*)
2. Phlegm (*Balgham*)
3. Yellow Bile (*Ṣafrā'*)
4. Black Bile (*Saudā'*)

Each person is thought to have a unique and innate mixture of these substances which then determines both his/her temperament and health:

- A "predominance of blood" is thought to give the person a sanguine temperament.
- A "predominance of phlegm" is thought to make a person phlegmatic.
- A "predominance of yellow bile" is thought to make the person bilious (or choleric).
- A "predominance of black bile" is thought to make the person melancholic.

When these Four Humors are in perfect balance, the person is healthy. Any imbalance of the Four Humors is thought to result in ill-health. Thus the thrust of unani treatment is aimed at restoring the natural balance, especially by dietary modifications.

Adapted from: http://www.drgrotte.com/Unani.shtml

Additionally, healers also use measures that induce:

- ripening (*Munzij*)
- purging (*Mushil*)
- cupping (*Mahajim*)
- sweating (*Taareeq*)
- diuresis (*Idrare Baul*)
- herbal bath therapy (*Hammam*)
- massage therapy (*Dalak*)
- purging (*Qai*)
- exercise (*Riyazat*)

Siddha Medicine

Siddha medicine is another Asian Indian native healing system which uses calcined metals and mineral powders to heal illnesses.

(FUND OF KNOWLEDGE CONT'D)

Other Cultural Beliefs and Rituals

Upwas

Older Hindus often practice regular *upwas* or fasts during which they may not eat or drink for extended periods. This may be done regularly (weekly, monthly, etc), and strict practitioners may not take their medications during a religious fast. In some cases, older patients may take their medications during upwas but refuse to take any food or fluids. This can be problematic in diabetic patients who may be taking their oral hypoglycemic medications during upwas days but not food, or taking neither food nor medication.

Muhurat

Certain days of the month are considered auspicious times and days (based on the Hindu lunar calendar). Traditional Hindu Americans may request that elective surgical procedures (e.g., hip replacements) be performed on these days.

Raahukala and Yamakanda

These are 90-minute periods in the Hindu calendar day, during which time older Hindu adults may be reluctant to undertake important actions (i.e. important medical visits or procedures). Patients may be worried that taking actions during these inauspicious periods may have a negative impact on the outcome.

Religious Paraphernalia

Married Asian Indian women often wear the *Mangalsutra*, a sacred necklace around their necks. Some Hindu men wear the *Upanayanam Poonal* (Tamil), *Janhav* (Marathi), *Janeu* (Hindi) sacred thread around their torso. These items are considered sacred and important and should never be cut or removed without the explicit consent of the patient or family.

Photo of a *Mangalsutra*.

Ritualistic wristbands (amulets) or waistbands also should be considered sacred too. Hindu married women often wear a *bindi* or *tilak* (dot on the forehead) with *Sindur* or *Kumkum* (red pigment on the hairline). Other symbols of marriage are bangles and toe rings and may vary in different regions of the country. Widows, divorcees, and unmarried women may not wear these symbolic articles.

When asked to remove these religious paraphernalia as a part of preoperative preparation, some patients may offer resistance. If resistance continues after the patient and family have been educated about the need for a sterile field in surgical procedures, the patient should be allowed to retain these items but requested to sign an informed consent form about the risk of infection.

Stigma Associated with Mental Illness

Mental illness is often considered a taboo, especially among the older Hindu population. *Dil udhas hona* is the term for "the blues" or depression in the Hindi, Urdu, Punjabi, and Gujarati languages. Traditional older Hindus may be resistant to admitting experiencing symptoms of any mental illness such as depression.

Traditional older Hindus may also refuse to believe that depression is an organic syndrome and that it can be treated with medications. In contrast, they may believe that feelings of sadness or hopelessness are a result of past karma and that the illness-associated suffering will eventually wash away the karma and, thus, should not be palliated with medications.

Health is usually related to the connectedness of the body, mind and spirit. Most older adults focus spiritually in preparing the soul for life after death. Some believe that mental illness is due to possession of the evil eye. Mental illness is seen as a stigma, so it is frequently concealed and presented to the physician as somatic complaints, such as headaches or stomach pain, instead of anxiety or depression.

CULTURALLY-APPROPRIATE GERIATRIC CARE: ASSESSMENT

Formality of Address

The concept of respect is an important one for most traditional Hindus. Old age is often synonymous with wisdom, and the concepts of filial piety and ancestral worship are still very central to the practice of this ancient religion. Hindu older adults often expect respectful and deferential treatment as their due. The term *ji* (for both men and women) or *da* (meaning big brother for men) is added to the end of a person's name or title to indicate respect (e.g., Anita-ji or Basu-da).

In turn, older Hindu adults often treat the physician with respect and deference and try their best (within their principles) to adhere to the physician's recommendations. Providers should address patients with warmth and respect and use a formal mode of address until given permission to use their first names, if ever. Younger and acculturated Hindus may be more willing to practice modern informality, but this should be determined by the patient's choice.

Respectful Nonverbal Communication

Older Asian Indian immigrants may be more accustomed to a paternalistic medical system in which the physician determines the care plan and makes the decisions. This premise does not apply to younger Asian Indian immigrants and more acculturated second- and third-generation Asian Indian Americans, who are more familiar with the patient-centered, customer-oriented model of modern biomedicine.

> **"Providers should address patients with warmth and respect and use a formal mode of address until given permission to use their first names, if ever."**

An Effective Approach

An approach that works well with all Asian Indian Americans is using a tenor that is warm, respectful, and assured, and then tailoring specifics to suit the decision-making styles of individual patients and families. This approach is appropriate for both older adults who may still prefer the physician to make important decisions and for the younger generations who may prefer to take charge of their care plan. With regards to communication about health issues, most Asian Indians prefer a family-centered approach. Older adults and their children often prefer not to disclose negative information to patients because they may worry that the truth may take away hope and increase suffering.

Gender Issues

The concept of shyness (or modesty), or *shrm*, in women is thought to be feminine and thus much valued in traditional India. Consequently, older Hindu women may be soft spoken and unwilling to be asked or to answer frank questions about intimate behaviors and practices (e.g., sexual history, incontinence, bowel regimens, etc). They often prefer to be examined by same-gender health professionals, although more acculturated and younger Asian Indian women may be very similar to their Western counterparts.

Sensitive inquiry will elicit most of the patient's preferences, and any sincere attempt to honor their preferences is greatly valued and appreciated. Having a female relative available when examining an older Hindu woman is a highly-recommended practice because it facilitates a frank interaction.

As noted under **Other Cultural Beliefs and Rituals**, married Asian Indian women may wear a thread/gold chain with pendants and black beads around their necks (*mangalsutra/ thali*). These should not be removed during the exam or surgery without the married Asian Indian woman's approval.

CULTURALLY-APPROPRIATE GERIATRIC CARE: DELIVERY OF CARE

Approaches to Decision-Making

Many traditional Asian Indian families have a hierarchy of decision-makers in place, usually beginning with the oldest son as the primary contact and disseminator of information. Families may often consult physicians who they know personally to get as much information as possible. This reflects a need to be well informed about the situation rather than a distrust of health care providers. Families may be reluctant to discuss personal, emotional, and financial issues with health care providers, because these matters are considered very private and traditionally are not shared with anyone other than those in the immediate household.

Traditionally, the Asian Indian society has been male dominated, with women assuming a submissive or passive role. In the modern era, the role of Hindu women is rapidly evolving. Many women play active roles in decision-making processes, although men may continue to serve as spokespersons of the family unit. Thus, clinicians should avoid stereotypical generalizations and ask open-ended questions to explore the values and decision-making styles of individual families.

There are aspects of the Hindu religion that commonly affect health care decisions. Hinduism is a social system as well as a religion; therefore customs and practices are closely interwoven. Karma is a law of behavior and consequences in which actions of past life affects the circumstances in which one is born and lives in this life. Despite complete understanding of biological causes of illness, it is often believed that the illness is caused by karma.

Disclosure and Consent

Asian Indian families are often interdependent with the autonomy unit consisting of the patient and spouse, adult children, and key members of the extended family. As described earlier, any health care professionals in the extended family are traditionally often called upon to interpret test results and help with decision making.

> **"Modesty is highly valued among Asian Indians and patients usually feel more comfortable with same-sex care providers."**

Older adults who are ill may practice "closed awareness," i.e., although they may be fully aware of the gravity of their illness, they may be unwilling to discuss openly about their illness and prognosis with their family.

Similarly, family members may request that the physician withhold information from their loved one who is ill due to the concern that the truth about the illness may negate the will to live. Thus, "Doctor *saab* (sir), please don't tell *Dada-ji* (grandfather) that he has cancer. He will just give up and die" may not be an uncommon request from a Hindu American family.

In many cases, the patient may expect the doctors to have all the answers and make all the decisions. As a result, the patient takes a passive role, answering but not asking questions, and waiting for the physicians to impart their diagnosis and recommendations. Most of the time medical advice is accepted without question.

Modesty

Modesty is highly valued among Asian Indians and patients usually feel more comfortable with same-sex care providers. Direct eye contact from women to men may be limited. Sensitivity and care should be taken in situations that may cause the patient embarrassment, such as wearing an examination gown, which the patient may consider too short.

(DELIVERY OF CARE CONT'D)

Value of Assertiveness

An active and commanding doctor who takes charge and gives prescriptions for medications may be preferred.

Physicians may be perceived as incompetent if they sound unsure. For example a less optimal way of communicating information to a patient is:

Dr. Johnson: "*Mr. Sinha, I am not sure if what you have is late onset lupus or Sjogren's syndrome. Your test results are inconclusive. I am going to start you on a medicine called hydroxychloroquin and see how you respond. What do you think?*"

Mrs. Sinha's interpretation of the statement:
"*This doctor does not know what disease I have. He wants to start me on a new medication and he is asking me what I think? I am not a doctor! What can I say?*"

A more optimal way of stating the same information:

Dr. Johnson: "*Mr. Sinha, there are two diseases that can mimic each other and cause the symptoms you have. One is called lupus and the other is called Sjogren's. Your test results are not helping us identify the exact disease you have. Your situation is not uncommon. I am going to start you on a medication which will help with your symptoms. I am also going to monitor your symptoms and blood work very carefully to see how you respond to the medication. I need you to take the medicines regularly and keep a log of your symptoms. I want you to come back to clinic in 4 weeks.*"

Many Asian Indian older adults do not prefer counseling as an option for problem resolution.

Inpatient Care

Hospital food can present a problem for Asian Indians, Hospitalization/institutionalization is stressful both for older adults and their families. Attention to the issues below will help greatly alleviate their stress.

1. Hospital Food

Many Asian Indian older adults observe religious dietary restrictions. Many are vegetarians or vegans. Even non-vegetarians may refuse to eat meat unless it is specially prepared (e.g. halal procedure for Muslims). Asian Indian older adults will often consume milk and butter, but not cheese or eggs. Clinicians should be mindful of the fact that there is a high incidence of lactose intolerance in this population. Hospital meals may also be too bland for most Asian-Indians. Many will prefer to know if the food served to them contains beef because beef is forbidden for Asian Hindus. Foods containing pork (including jello, marshmallows, yogurt stabilized with gelatin) are prohibited for Muslims and many Hindus as well as those who follow a religiously-prescribed diet.

2. Hospital Dress Code

Some patients hesitate to wear hospital gowns and pajamas as these have been used by others, even if you assure them that these have been washed and sterilized. When a patient is in the hospital the sacred thread across the chest in men (upanayanam) and around the neck in women (mangalsutra) should not be removed or cut without the permission of the patient or family. Sikh men do not cut their hair and wear a bracelet and kirpan.

3. Surgeries and Procedures

Some Asian Indian older adults may prefer to have the surgery only on some auspicious days or refuse to have surgery during inauspicious parts of the day. (*See* ***Raahukaala and Yamakanda*** *on page 18*.) While these considerations can be less important during emergency procedures, they become a challenge during elective procedures. For example, older adults will refuse to

(DELIVERY OF CARE CONT'D)

permit caesearian operations for their daughters and daughters-in-law for fear of the baby being born during an inauspicious time (it is thought that the time of birth is critical in determining the fate of the individual and the birth time is used to create the astrological chart of the baby). Asian Indian Older adults may also refuse to have elective surgeries like prostactomy, etc. during inauspicious times. This creates a challenge in the modern hospital environment where operation room time is scarce and the surgeons and interventionalists are challenged for time. It is important to gently question the patient and family when scheduling elective procedures and surgeries and negotiate a solution that is acceptable to them as well as to the health care institution.

4. Medications

Many Asian Indian older adults may not be adhering to their prescribed out-patient medication regimen. Great caution must be exercised in managing their in-patient medications. For example, an older adult may be on Glucotrol 15 mg per day according to their out-patient chart. When admitted to the hospital, the clinician is naturally likely to continue the same dose for the patient. However, if the patient was not taking the medication as prescribed, a sudden introduction of Glucotrol 15 mg could lead to severe and even potentially fatal hypoglycemia. Many Asian Indian older adults may be using Ayurvedic/Siddha/Unani medications and it is important to elicit and document this. A very gentle and non-judgemental approach is most likely to be successful in eliciting the true practices of the patient.

5. Body Care

Modesty (*Shrm*) is a strong Asian Indian value, especially for women. Older adults are loath to be touched and examined and thus wary about breast examinations and pap smears. This is also true for procedures such as an enema or bladder catheterization. Patients will likely strongly prefer care from persons of same gender as feasible. Family members may want to help in providing intimate body care to avoid care from persons of the opposite gender.

6. Communication

Communicating with persons with Limited English Proficiency is challenging. Family members may insist on serving as interpreters. Using professional interpreters is strongly recommended. Always avoid using children and grandchildren under 18 years of age as interpreters.

7. Visiting Hours

Family and friends will likely want to stay with a hospitalized person and be included in performing personal care. The patient will be more likely to feel happy rather than tired after a visit by their family members and friends. In fact, the patient may be disappointed if all members of the extended family as well as close friends do not visit. This can result in a high volume of visitors that may be disruptive in a hospital environment. Also, visitors are expected spend significant time with the patient at the bedside (as opposed to dropping in for a courtesy visit). For many Asian Indians, hospital visits are a very important way to provide support for the sick person and the family.

End-of-Life Issues

End-of-Life Decision Making and Intensity of Care

Although very few studies have been conducted regarding the prevalence of and knowledge about advance care directives among Asian Indian, the data indicate that many individuals do not have these documents. This may hold particularly true for older Hindu adults who were born in India. Small studies have also shown an inverse relationship between the strength of religious and traditional beliefs and the presence of a completed advance care directive.

As mentioned earlier, Asian Indian philosophy has a multitude of interpretations that have become intricately woven into cultural customs and traditions

(DELIVERY OF CARE CONT'D)

that vary tremendously among regions in India.

Furthermore, Asian Indians may not view death as a final event but more as a transition for the soul from one life to the next.

The family plays a central role at the time of terminal illness or death. From a traditional Asian Indian perspective, it is very important for the family members to be at the bedside of the terminally-ill patient praying, chanting hymns, or bringing in pictures or idols of gods/goddesses.

Some families may be hesitant to allow health care providers to give a dying patient sedating medications (because it may be important to the family that the patient be as awake as possible through the dying process). These traditions reflect a belief that dying individuals should be thinking of God as they go through the dying process, because it is believed that the nature of one's thoughts at the time of death determines the destination of the departing soul.

However, if the clinician identifies that the patient is experiencing intractable suffering caused by refractory symptoms (e.g., pain or dyspnea) and is requesting palliation of these symptoms, sedation of the patient and gentle education of the family members will likely result in assent with needed palliative measures.

Some Asian Indian family members may be hesitant about intubating the dying patient or doing a tracheostomy as the conscious patient might not be able to express his or her last wishes.

At the time of death, family members may request that the body be positioned in specific directions (head facing east for some and feet facing south for others) or that it be placed on the ground (return to mother earth). Families may also request health care providers to allow them to place a *Tulsi* (Ocimum Sanctum) leaf or drops of water from the Ganga River on a patient's lips. They may want to audibly chant the Bhagavad Gita or other vedic hymns at the time of death. Again, this allows a patient to focus on God as their soul leaves the body. Muslims may express a preference for moving the patient so that he/she faces Mecca and may want to chant the Koran at the bedside.

"At the time of death, family members may request that the body be positioned in specific directions (head facing east for some and feet facing south for others) or that it be placed on the ground (return to mother earth). Families may also request healthcare providers to allow them to place a Tulsi (Ocimum Sanctum) leaf or drops of water from the Ganga River on a patient's lips."

After death, it may be important for family members (of the same gender) to be allowed to perform ritual washing of the body and prepare it for cremation (typically Hindus do not bury their dead), which should ideally be done within 24 hours of death. Muslims, in contrast, typically bury their dead.

Christians may opt for burial or cremation. Most Asian Indian families will not request an autopsy but may not be opposed if there are clear reasons for it. Regardless, this is a delicate topic and should be approached with the sensitivity it deserves.

The cultural and religious background of Asian Indian older adults often influence end-of-life care decisions. Older patients are more likely to subscribe to family-centered decision making rather than being autonomous. Sometimes family members may ask the physician not to tell patients their diagnosis or other important information. Open-ended questions as to why the family does not want the patient to know may be helpful.

(DELIVERY OF CARE CONT'D)

Many Asian Indian patients prefer to die at home and there are specific rituals and practices in each religious community. Many believe suffering is due to karma. When close to death, family members are likely to be present in large numbers. A dying person may wish to be moved to the floor, with an idea of being close to the mother earth. Family members will prefer to wash the body after death.

The mourning family may prefer to have a priest (Hindu and Christian) or a *mullah* (Muslim) perform a prayer and blessing. It is very important to provide privacy to the family after the death of a family member to allow the religious rites to be performed. It is an accepted practice for family members and others to have an open expression of grief. After cremation, there is a mourning period that lasts 10 to 40 days.

Most Asian Indians do not readily agree to a post-mortem examination or organ donation—although these beliefs are changing amongst the recent immigrant elderly. Molzhan et al (2005) conducted on South Asian Canadians to understand their beliefs on organ donation, with study participants belonging various age ranges, religions and backgrounds. They found that a wide range of themes emerged concerning death and organ donation; most noted that the community involvement and information would be useful in encouraging better participation.

The authors findings show that one should jump to conclusions on issues concerning organ donation on the mere premise of the individual's ethno-cultural background.

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ACCESS AND UTILIZATION

Possible Barriers to Health Care Accessibility for Elderly Asian Indian Immigrants

Accessibility to health care could be one the problems faced by the recently immigrant elderly. Other problems include:

- lack of knowledge of the availability of health care
- lack of health insurance
- transportation—cannot use public transportation, cannot drive, dependent on their children
- monetary—cost of treatment, expensive, most are dependent on their children
- language—unable to communicate in English, lack of translation; inability to read medication labels in English
- abandonment by adult children after immigration
- learned helplessness
- not wanting to burden their children financially

Preventive Care

Compliance/Health Care Utilization

Compliance or adherence is an important factor to be considered in elderly Asian Indians. The culturally specific factors that determine adherence in Asian Indian immigrants have not been studied, although they could be inferred from other studies aimed at racial or culture differences.

Li (2008) studied compliance in elderly Chinese immigrants points out that their length of stay in the U.S. and gender could play an important role in a treatment adherence (Li et al, 2008).

Some predictors of poor adherence in general population (Osterberg, 2005)

- Having no insight into the illness process, and barriers to care or medications
- Inadequate follow-up or unclear discharge planning
- Side–effects of medications
- Do not believe in the treatment process
- Poor patient-doctor relationship
- Complexity of the treatment
- Cost of medication, co-payment or both
- Presence of depression, cognitive impairment, asymptomatic disease

Possible barriers to adherence (Osterberg, 2005)

- The patients do not understand the disease process and about the necessity of undergoing treatment and the risks of forgoing medications or doses
- Patients' inability to follow complex treatment regimens
- Do not understand the risks of improper use of medicine
- Patients' limited access to health care system clinics and pharmacy, high cost of medications
- Physicians' limited knowledge on cost of drugs and insurance coverage

(ACCESS AND UTILIZATION CONT'D)

Home Remedies

Older Asian Indian women often recommend home treatment. Home remedies, such as massage, bathing and herbal medicines may be used first, while a physician is sought out only for serious illness. Some behaviors that many Asian Indian older adults prefer include ritual chanting by a priest. Amulets—like tying a thread around the sick person's wrist or writing a protective verse to be worn in a metal cylinder on a chain around the neck or wrist are common.

Attitude Towards Home Health Care

For many Asian Indian older adults, the activities of social workers and home care nurses are unfamiliar and often not welcomed. Home visits by these providers are not always acceptable. They seek help from family and friends and are unlikely to place an older adult in a nursing home except as a last resort.

Use of Advanced Health Care Directives

According to Doorenbos, (2003) a living will is less prevalent amongst Asian Indian Hindu immigrants, which was 9%, compared to the national average of 15¬20%. This was positively correlated to their stronger religious beliefs, attributed to family form of decision making. In addition, the author suggests that the ethnic groups with familial form of decision making should be encouraged to use durable power of attorney instead of a living will which is individualistic (Doorenbos, 2003).

INSTRUCTIONAL STRATEGIES

In addition to lecture and readings, the following cases can be used for discussion or as written assignments.

Case 1

Mr. Sharad Patel is an 82-year-old man with a history of:

- weight loss
- mild dementia

He is admitted to the hospital for an episode of bright red blood per rectum.

Further evaluation, including a colonoscopy reveals a large ulcerative mass in the colon and biopsy confirms colon cancer. Imaging reveals extensive local and hepatic metastasis. Patient's functional status is declining as well.

The oncologist recommends palliative chemotherapy. You are a member of the primary health care team. Mr. Patel asks you questions about his condition and his prognosis. However, his son Ashwin (who is also his durable power of health attorney) as well as his wife, Mrs. Patel have already instructed everyone in the health care team NOT to tell the patient that he has cancer.

How would you respond to this difficult situation?

Discussion

It is not uncommon for older Asian Indians to depend on the family to make medical decisions. Older Asian Indians are much more likely to subscribe to family centered decision rather than making these decisions by themselves.

This is a situation that requires sensitive handling. A clinician is legally and morally bound to answer all the patient's questions with honesty. While the physician is obliged to exhibit primary loyalty to the patient, patients do not live in a vacuum. Typically, family members (especially the durable power of health attorney) are key stakeholders in the patient's current and future well-being.

Thus it is important for the physician to maintain an alliance with the family, while concurrently respecting the patient's wishes.

This Specific Situation

Mr. Patel has mild dementia but there is no indication that he is not decisional. He has the right to know about his condition and the clinician is bound to answer them truthfully. The challenge in this situation is that the patient's family does not want you to tell the truth to the patient. Requests like this are usually an expression of love (i.e. the family is fearful that the patient would suffer if he knew the truth and they are trying to protect the patient).

One optimal approach to this problem is as follows:

Step 1: Tell the patient "*Mr. Patel, I know that you have a lot of questions. Your family members will also have a lot of questions. I am going to gather all the accurate information and set up a meeting with you and your family to talk about this important issue.*"

Step 2: Tell the family: "*You are asking us not to discuss the illness with Mr. Patel. However, Mr. Patel wants to know what his illness is. Our primary duty is to our patients. We cannot legally or ethically withhold this information as it is the patient's right to know. We would like to set up a family meeting and discuss with both you and the patient about his condition.*"

Step 3: Hold a family meeting and discuss the situation.

(INSTRUCTIONAL STRATEGIES CONT'D)

If the family members vehemently insist that you still not tell the patient the truth:

Step 4: Meet with patient and family with at least two members of the inter-disciplinary team. Inform the patient and family about your primary obligation to the patient. Explain that the patient is asking questions about his illness and that the family is asking that you speak only to them. Then ask,

"*Mr. Patel, your family is requesting that we discuss your health issues not with you, but just with them. You are understandably asking us questions about your disease. We are obligated to do what you ask us to do. How would you like us to handle this situation? Do you want to know the information about your illness or do you want us to talk to your family.*"

Case 2

Mrs. Kamala Chary is a 65-year-old woman who lived in India for most of her life and moved to the United States two years ago to spend her final years with her son. She came in to the doctor's office with a complaint of generalized tiredness. She states, "*I have no energy and feel tired all the time.*"

Further questioning reveals that she has problems sleeping. She admits that she is home bound and does not have any friends. Rest of the history and physical is negative. She is not anemic. Recent labs are all within normal limits. She is not taking any medications. You suspect depression and you ask her "*Are you depressed?*" and she immediately gets vehemently upset and denies depression. She then stops engaging with you for the rest of the visit and asks her son to take her home.

What could the clinician do to help her?

Discussion

Since there is stigma about mental illness, most Asian Indian older adults will present their psychological problems with physical complaints. This patient is most likely depressed. However, the cultural taboo and stigma associated with mental illness may cause fear and thus prevent the patient from freely expressing her feelings. It is also to be noted that not all depressed patients have self awareness about the depression. A gentle and sensitive approach to build trust will likely facilitate an open and frank dialog. Any information should be obtained sensitively and addressed carefully.

Case 3

Mrs. Haneef Malik is a 62-year-old Asian Indian Muslim lady with a history of stroke and is admitted for severe bilateral pneumonia. A speech therapy evaluation revealed swallowing dysfunction. A clear liquid diet is ordered and the nurse offers the patient a choice of several jellos. However, the patient refuses the jello, even though she stated earlier that she is hungry.

What could be the underlying cultural issue?

Discussion

Muslims who follow the halal diet may reject this food. This person has come from an ethnocultural tradition that prohibits eating pork. Gelatin is made from pig bones. So the dietitian should understand the cultural reason for avoiding such food items and offer other food alternatives.

STUDENT EVALUATION

Multiple Choice/True or False

1. In traditional Asian Indian society, extended family members usually live as a single-family unit.

- ❑ True
- ❑ False

2. The prevalence of coronary artery disease is higher in Asian Indian women than in women in the U.S. as a whole.

- ❑ True
- ❑ False

3. The most common religion practiced by Asian Indians is

- ❑ (A) Buddhism
- ❑ (B) Hinduism
- ❑ (C) Sikhism
- ❑ (D) Christianity

4. For the majority of Asian Indians, eating beef is forbidden.

- ❑ True
- ❑ False

5. Asian Indian women generally prefer same-sex health care providers.

- ❑ True
- ❑ False

Multiple Choice Answer Key

1. **True**. The family unit is greatly valued in the traditional society. Often the parents will join their son's family household after they retire or if help is needed. The grand parent's role in raising the children is highly regarded.
2. **True**. The prevalence of coronary artery disease is three times higher in Asian Indian women than in women in the US as a whole.
3. **(B) Hinduism**. Asian Indians are a multi religious society. Hinduism is the most common religion practiced in India. Other religions practiced include Islam, Sikhs, Christianity and Buddhism.
4. **True**. More than eighty percent of the people in India practice Hinduism. Beef is forbidden in Hinduism. Many Asian Indians are vegetarians.
5. **True**. Modesty is highly valued among Asian Indians older adults, and patients generally feel more comfortable with same sex health care providers

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