



Health and Health Care of

Native Hawaiian & Other Pacific Islander Older Adults

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



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DESCRIPTION

This module presents available information about older adults who identify themselves as Native Hawaiian and/or Pacific Islander, including Samoans, Tongans, Micronesians, and Marshallese among others. The module discusses demographics, patterns of health risk, and the role of cultural competency in the health assessment and treatment of Native Hawaiians and other Pacific Islanders.

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MODULE CHARACTERISTICS



Time to Complete: 2 hrs, 0 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

LEARNING OBJECTIVES

After completing this module, learners should be able to:



1. Explain the difference between health care decision-making based on the principle of individual autonomy vs. that of group consensus particularly as it relates to Native Hawaiians and Pacific Islanders.
2. List at least four health disparities found in the Native Hawaiian and Pacific Islander populations.
3. Compare and contrast the differences in communication styles encountered when evaluating Native Hawaiians and Micronesians in the physician office or hospital setting.
4. Describe at least two components needed for a successful treatment intervention with Native Hawaiian and/or Pacific Islander populations.

INTRODUCTION AND OVERVIEW

Demographics

Data on Native Hawaiians and Pacific Islanders is extremely limited and is often confounded by the tendency to aggregate races with different patterns of health risk under headings such as Asians and Pacific Islanders (APIs). Such headings are problematic as they do not recognize the diversity that exists within this population group (Louie, 2001). For example, the average life expectancy for APIs is 80.3 years—higher than the life expectancy for the total US general population (75.2 years). However, APIs include both the Japanese, who have one of the longest life expectancies at 82.1 years, and Native Hawaiians who have one of the lowest at 68.3 years. Data on specific races by age group is even less available, highlighting the need for continued research in this area.

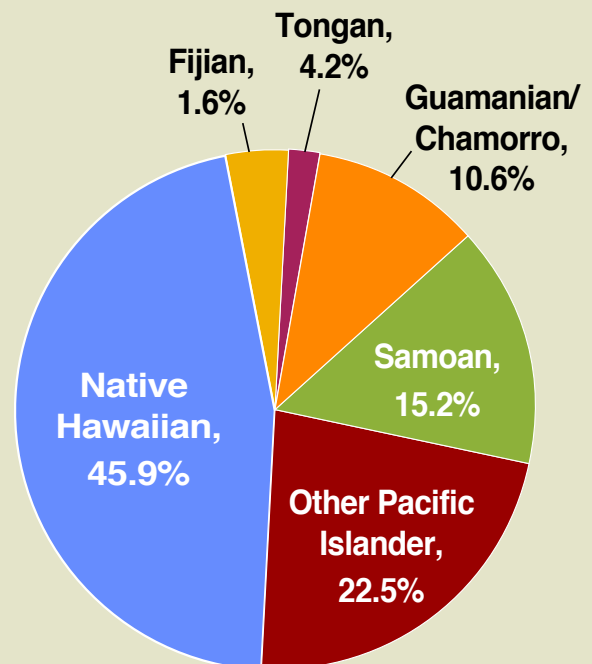
Accordingly, the Office of Management and Budget (OMB) introduced a new racial category in 2000 that identified Native Hawaiians and other Pacific Islanders as a separate category disaggregated from Asian Americans (Executive Office of the President, Office of Management and Budget (OMB), & Office of Information and Regulatory Affairs, Accessed August 29, 2007). This curriculum will use OMB's definition of race and ethnicity.

Within this new racial category, Native Hawaiians comprise the largest proportion of individuals followed by Samoan and Guamanian/Chamorro (See Figure 1) (US Census Bureau, Accessed August 29, 2007). However, other Pacific Islander groups exist in the US but are limited by the relatively small size of their total population.

For further information on demographics, see the census web site: www.census.gov



Native Hawaiians & Other Pacific Islanders (United States)



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Source: US Census 2000

(INTRODUCTION AND OVERVIEW CONT'D)

For the purposes of this curriculum, the scope was limited to the following racial/ethnic groups based on available literature:

Native Hawaiian (the indigenous population of the State of Hawaii),

Samoa (the indigenous population of Samoa or Western Samoa),

Tongan (the indigenous population of the island nation of Tonga),

Guamanian/Chamorro (the indigenous population of the island nation of Guam),

Micronesian (the indigenous population of the cluster of islands of the Federated States of Micronesia, Palau, Marshall Islands, and the Commonwealth of the Northern Mariana) and

Fijian (the indigenous population of the island nation of Fiji).

“ 32% of all Native Hawaiians and other Pacific Islanders live in the state of Hawaii, followed by California with 25% ”

Ethnologically, the Pacific Rim area can be described by three regions:

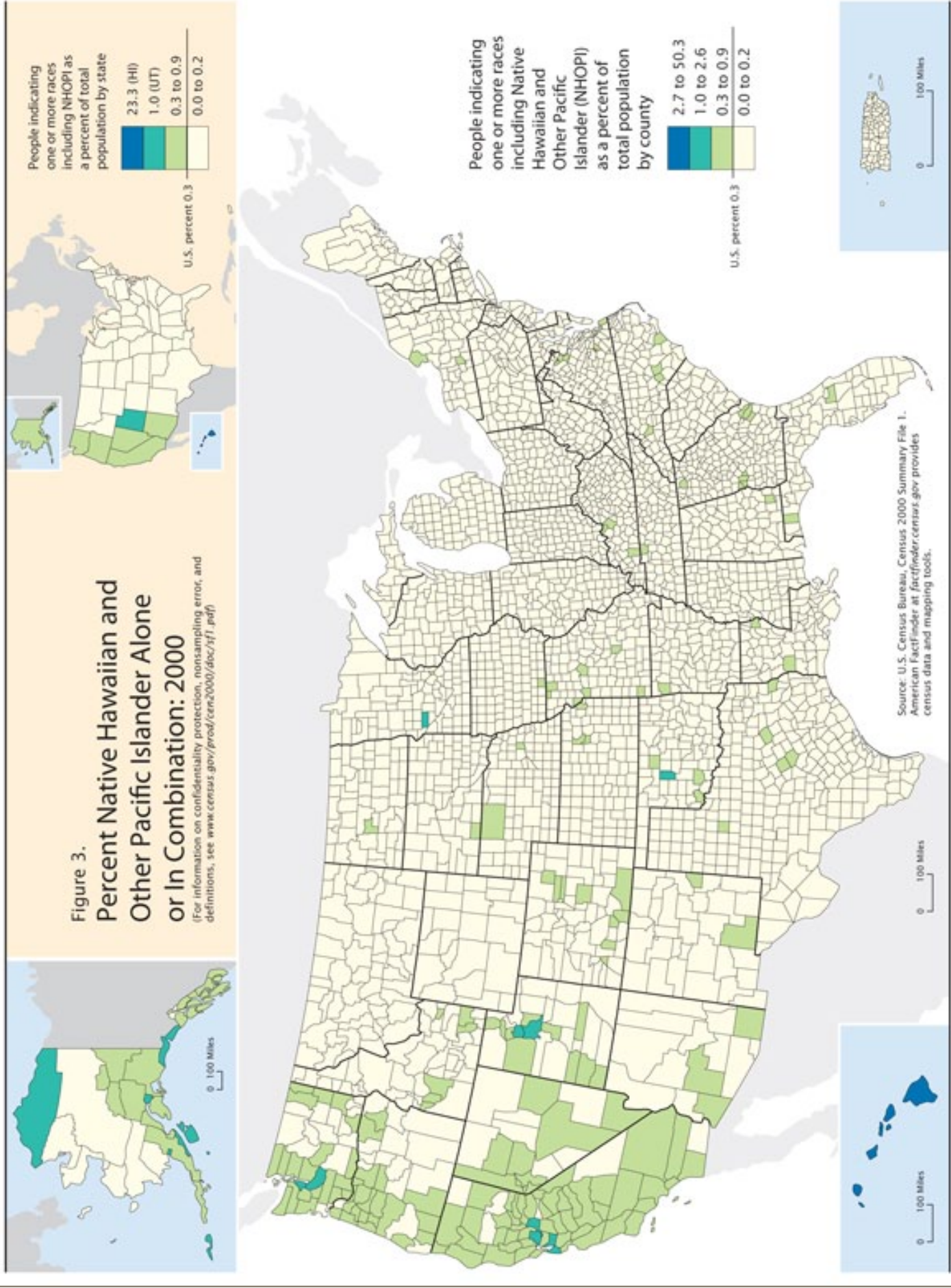
1. Micronesia (i.e. Federated States of Micronesia, Palau, Commonwealth of the Northern Marianas islands, Guam),
2. Melanesia (i.e. Tonga, Fiji), and
3. Polynesia (i.e. Samoa, Hawaii).

These groupings can be helpful in that they cluster people by common heritage and in some cases by linguistics, cultural practices and values (Chappell, 1997).

Native Hawaiians and Other Pacific Islanders: US Population

Approximately 32% of all Native Hawaiians and other Pacific Islanders live in the state of Hawaii, followed by California with 25% (Grieco, accessed August 29, 2007). The distribution of Native Hawaiians and Pacific Islanders as a percentage of the total US population is shown in the map in Figure 3 (page 6). According to the 2000 Census, 5% of the total Native Hawaiian/Pacific Islander population is aged 65 and older (US Census Bureau, Accessed August 29, 2007).

In general, Native Hawaiians and Pacific Islanders are known to bear a disproportionately higher prevalence of many common conditions such as obesity, diabetes, and cardiovascular disease. In addition, key health indicators such as life expectancy continue to document disparities that exist between Pacific Islanders and the general US population (Park, 2009).



(INTRODUCTION AND OVERVIEW CONT'D)**Background**

The islands comprising Oceania are widely dispersed and composed of both volcanic and coral land mass. Geologically, the oldest islands consist of relatively flat spits of land, often shaped in the form of crescents that rise from coral reefs built up over eons around a central volcano that has eroded into the ocean. Islands that are geologically newer, such as the Hawaiian Islands, have larger volcanoes some of which are active, dormant or extinct.

Centuries before the birth of Christ, the Pacific Islands were populated progressively from West to East by several migrations of fishermen from Malaysia and South East Asia. **There appear to have been four independent migrations throughout Oceania by:**

- Melanesian aborigines
- A pre-Polynesian migration to coastal Melanesia
- The Polynesians
- An independent non-Polynesian colonization of Micronesia

As part of the Polynesian migration, Native Hawaiians traveled from the Marquesas Islands (in what is now French Polynesia) by canoe and settled in the archipelago of islands now known as Hawaii more than 1500 years ago (Anderson et al., 2006; Bushnell, 1993). In 1778, Captain James Cook was the first documented European to arrive in the Hawaiian Islands. Just prior to the first Western contact, it is estimated that there were 300,000-400,000 Native Hawaiians living throughout the archipelago of the Hawaiian Islands (Bushnell, 1993).

In Hawaii, as in other isolated areas of Oceania, contact with foreigners meant the introduction of Western diseases for which the native population had no immunity, such as measles, chicken pox, and venereal diseases. These diseases resulted in the near extinction of the native population. Other diseases, probably introduced via Asian contact, such as leprosy or Hansen's Disease, took a similar toll on the Native Hawaiian population (Bushnell, 1993). The long-term consequence of these events was that few full-blooded Native Hawaiians were able to survive. Those that remained of the Native Hawaiian population became integrated with other emigrant populations to Hawaii and eventually inter-racially married resulting in a high proportion of racially mixed Native Hawaiians.



Close-up of a young man sitting on a ship's bow, Hawaii, USA.
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PATTERNS OF HEALTH RISK

Life Expectancy

At 71.5 years for men and 77.2 years for women, life expectancy for Native Hawaiians is lower than for the state of Hawaii (75.9 years for men and 82.1 years for women) and the US overall (Anderson et al., 2006). Similarly, residents of the Federated States of Micronesia and the Republic of the Marshall Islands have lower life expectancies than the total United States population (60 years versus 75 years for men; 63 years versus 80 years for women) (Anderson et al., 2006).

Mortality

The reported death rates for Asian or Pacific Islander older adults are lower than rates for whites, blacks, or American Indians (Minino, Heron, Murphy, & Kochanek, 2007). However, this is likely due to the aggregation of data from Asians, who tend to have longer life expectancies, with Native Hawaiians and other Pacific Islander racial groups, who tend to have lower life expectancies (Braun, Yang, Onaka, & Horiuchi, 1997).

Unfortunately, mortality rates for Native Hawaiians and other Pacific Islander races by age group are not currently available for the overall US population. However, for the state of Hawaii, Johnson et al. (Johnson, Oyama, LeMarchand, & Wilkens, 2004) found that the age-adjusted death rates for Native Hawaiians due to heart disease, cancers, stroke, accidents and diabetes were higher than those for the state of Hawaii as a whole. The authors also concluded

“ For the state of Hawaii, the age-adjusted death rates for Native Hawaiians due to heart disease, cancers, stroke, accidents and diabetes are higher than those for the state of Hawaii as a whole. ”

that fewer Native Hawaiians are dying in the older age groups than expected in part because fewer Native Hawaiians reach older age categories compared to other racial groups in Hawaii.

Year 2000 Age-Adjusted Death Rates per 100,000 (State of Hawaii)

Selected Causes of Death	Total State	Native Hawaiian
Heart Disease	221.9	221.9
Cancers	155.8	208.6
Stroke	60.0	72.0
Accidents	27.5	32.0
Diabetes	16.3	38.0

Source: Johnson et al. 2004, reprinted with permission

In 2000, Native Hawaiians comprised approximately 20% of the state of Hawaii's population. In the 65-75 year age group, 20% of all deaths were attributed to Native Hawaiians. However, among the 75-84 and > 85 years and older age groups, Native Hawaiians accounted for only 13% and 7% of all deaths, respectively.

Cardiovascular disease deaths was the number one cause for death, and occurred more frequently in urban than rural areas. In a 1996 study, Melanesian Fijians were reported to have an overall mortality rate at 15.9 and 9.2/1000 person years in men and women, respectively (Collins, Dowse, Cabelawa, Ram, & Zimmet, 1996).

(PATTERNS OF HEALTH RISK CONT'D)

By comparison, the leading causes of death in the United States in 2004, included diseases of the heart (27%), cancer (23%), and stroke (6%) (National Center for Health Statistics, Accessed August 24, 2007).

In American Samoa, Guam, and the Federated States of Micronesia, similar causes for mortality were observed (Ichiho, Gladu, Keybond, & Ruben, 2004; Ichiho, Wong, Hedson, & David, 2004; Ruidas, Adaoag, Williams, & Sesepasara, 2004; Shehata, Kroon, Skilling, & Taulung, 2004; Taoka, Hancock, Ngaden, Yow, & Durand, 2004; Tseng, Omphroy, Cruz, Naval, & Haddock, 2004). By contrast, the Republic of Palau reported cardiac arrest and respiratory arrest as the 2 leading causes of death (Wong, Taoka, Kuartei, Demei, & Soaladaob, 2004), while the leading cause of death in the Marshall Islands was sepsis (Kroon et al., 2004).

Morbidity**General Health Status**

According to the BRFSS, (Salvail FR et al, 2003), 32% of Native Hawaiian older adults self-reported being in “excellent” or “very good” health, compared to 49% of Caucasian older adults. Nearly 50% of Native Hawaiian older adults felt that they were in “good” health compared to 31% of Caucasian older adults, with similar percentages of Native Hawaiians and Caucasians reporting either “fair” or “poor” health.

With regard to receiving preventive health care, Native Hawaiian older adults were similar to their Caucasian counterparts in terms of receiving annual flu shots (70.0% versus 68.5%) and in having health care coverage (both 99.3%) (Salvail FR et al., 2003). In other areas of preventive care, studies have found that Asian and Pacific Islanders have lower rates of pneumonia vaccination, under use of mental health and preventive health services (i.e. cancer screening) and poorer early detection rates compared to other ethnic groups (Coughlin & Uhler, 2000; Kagawa-Singer & Pourat, 2000).

A study on health-seeking behaviors of Native Hawaiian men found that the primary reasons for postponing a visit to the doctor included “not wanting to know”, embarrassment, shame, fear, and not having enough time (Hughes, 2004).

**Summary**

- Less than one-third of Native Hawaiian elders reported excellent health status and this was lower than among their Caucasian counterparts.
- However, a greater number of Native Hawaiian elders reported “good health” compared to Caucasian elders.
- Native Hawaiian elders have comparable rates of annual flu vaccination but lag behind in other preventive health practices.

(PATTERNS OF HEALTH RISK CONT'D)

Cardiovascular and Cerebrovascular Disease

Cardiovascular and cerebrovascular diseases are the leading cause of death in Native Hawaiians with 5.8% of all age groups of Native Hawaiians having been told that they had a heart attack or myocardial infarction, compared to 3.8% of Caucasians (Salvail FR, et al, 2003). Similarly, 4.4% of Native Hawaiians reported having angina or coronary heart disease which was somewhat higher than the 3.7% reported by Caucasians (Salvail FR et al, 2003). Overall, Native Hawaiians had a lower prevalence of stroke, 1.9% compared to 3.2% for Caucasians (Salvail FR et al, 2003).

Among elderly with chronic heart failure, Wheeler et al. found that Asian Americans and Pacific Islanders had significantly more procedures and a longer length of hospital stay compared to Caucasians (Wheeler et al., 2004). Elder-specific rates of heart disease or stroke for Native Hawaiians and other Pacific Islanders are extremely limited and interpretations of this data should be cautious.



Summary

- Overall, cardiovascular disease (heart disease and stroke) in Native Hawaiians is higher than in Caucasians living in Hawaii; and the number of procedures and length of stay in hospitals is also higher in Native Hawaiians.
- However, stroke is more prevalent in Caucasians compared to Native Hawaiians.

Dyslipidemia

Few sources of health information on dyslipidemia stratified by race and age are available. In the Native Hawaiian Health Research (NHHR) Project, the prevalence of hyperlipidemia, defined as a total cholesterol >200 mg/dL, among a population-based sample of Native Hawaiians in a rural community in Hawaii was reported at 48% (crude estimates) (The Native Hawaiian Health Research Project, 1994). In another epidemiological study in Western Samoa, Hodge et al. found the rates of dyslipidemia had doubled from 18% in 1978 to 36% in 1991 (Hodge, Dowse, Toelue, Collins, & Zimmet, 1997).

By comparison, in the US during a similar time period, the prevalence of elevated total cholesterol actually decreased between 1976-80 and 1988-94 from 27.8% to 19.7% respectively (National Center for Health Statistics, 2004). A 2006 study found among all age groups of Chamorros residing in Guam, that 36.4% of participants reported having “high blood cholesterol” (Chiem et al., 2006). Finally, according to the Hawaii Health Survey, the prevalence of high blood cholesterol was slightly lower at 64.4 per 1,000 population for Native Hawaiians compared to 66.2 per 1,000 for Caucasians (Hawaii Health Survey 2005, Accessed August 22, 2007).



Summary

- Hyperlipidemia (elevated total cholesterol) rates have increased or remained the same among most Native Hawaiian and other Pacific Islander populations compared to a decrease in prevalence among the general US population.

(PATTERNS OF HEALTH RISK CONT'D)

Hypertension

In the state of Hawaii, 53.2% of Native Hawaiian older adults were found to be at risk for high blood pressure compared to 44.6% of Caucasian older adults (Salvail FR et al, 2003). Of note, in the US general population (all ages), prevalence of hypertension is reported at 28.7% in men and 30.5% in women (National Center for Health Statistics, 2004). Thus, hypertension remains a common health problem among the elderly and Native Hawaiians have a higher prevalence compared to Caucasians.

Among other Pacific Islanders, a 1986 cross-sectional study of urban and rural Tongans (all ages) found the overall prevalence of hypertension to be 8.4% (Finau, Prior, & Salmond, 1986). Among adult Chamorros of all age groups, 43% had been told by a health professional that they had hypertension (Chiem et al., 2006).

The prevalence of diabetes among Native Hawaiian older adults is 19.6%, more than twofold the prevalence among Caucasian older adults (9.4%) (Salvail FR et al, 2003). Data on diabetes among other elderly populations by race is sparse. However, the prevalence of diabetes among nearly all Pacific Islander racial groups (all ages) is higher compared to the overall prevalence of 7% for the general US population (American Diabetes Association, Accessed August 22, 2007). In the NHHR Project, the prevalence of Type 2 diabetes mellitus and impaired glucose tolerance among Native Hawaiians (ages > 30 years of age) was found to be 22.4% and 15.6%, respectively (Grandinetti et al., 1998). Among the elderly participants in the NHHR Project, the prevalence of diabetes and impaired glucose tolerance was found to be 33% and 22% respectively.



Summary

- Hypertension is more prevalent among the elderly compared to other age groups and this is also reflected in Native Hawaiian and Pacific Islander elderly.
- However, the prevalence of hypertension has been reported to be higher among Native Hawaiian and other Pacific Islander elders compared to Caucasian elders, although existing data is extremely limited.

Diabetes Mellitus

For the reported prevalence of diabetes mellitus among other Pacific Islanders groups please see the table below.

The Prevalence of Diabetes Mellitus Among Other Pacific Islander Ethnic Groups

Ethnic Group	Prevalence of Diabetes
Chamorros (all age groups)	16.2% diagnosed with diabetes (Chiem et al., 2006).
Melanesians	Prevalence of Type 2 diabetes in men 28% and in women 33% (Dowse et al., 1994). Prevalance of impaired glucose tolerance was 21% in men and 22% in women. (Dowse et al., 1994).
Marshallese on the Island of Ebeye	Age-adjusted prevalence of diabetes was 27% (Yamada, Dodd, Soe, Chen, & Bauman, 2004).
Fijians	Prevalence of diabetes was 12% (Okihiro & Harrigan, 2005).

(PATTERNS OF HEALTH RISK CONT'D)

Diabetes is currently recognized as a global health problem and this is consistent with the rising burden of diabetes reported among Polynesians (including Native Hawaiians) and Micronesians. For example, in Western Samoa, the incidence of diabetes increased from 0.1% to 5.3% among men residing in the rural community of Poutasi between 1978 and 1991 (Okihiro & Harrigan, 2005).

Studies have also found that diabetes is especially on the rise among Polynesians, Micronesians and Melanesians who have prolonged exposure to more acculturated or westernized lifestyles compared to more traditional subsistence-based lifestyles (Okihiro & Harrigan, 2005; Papoz, Barny, & Simon, 1996). Unfortunately, nearly all of the published literature excluded the elderly and surveyed individuals between 30-64 years of age; thus, one must be cautious to generalize these data in the elderly population.

*Summary*

- The prevalence of diabetes in Native Hawaiians and other Pacific Islander populations is higher than that seen in the general US population and is linked to several risk factors including but not limited to a westernized lifestyle.
- Population-based studies among Native Hawaiians living in Hawaii, found that among Native Hawaiian elders the prevalence of DM and impaired glucose tolerance was 33% and 22% respectively.

Chronic Kidney Disease and End Stage Renal Disease

Disparities in chronic kidney disease (CKD), the precursor of end stage renal disease (ESRD), have not been thoroughly studied in high risk populations such as Native Hawaiians and other Pacific Islanders. However, Hall et al. found that Asians (including Native Hawaiians and Pacific Islanders) are at increased risk for development of CKD outcomes even after adjustment for baseline kidney disease and other ESRD risk factors (Hall, Sugihara, Go, & Chertow, 2005). A 2007 study by Mau et al. found that age was not an independent risk factor for chronic kidney disease in Native Hawaiians (Mau et al., 2007).

The rate of end stage renal disease (ESRD) in the United States is 1,542 per million population (US Renal Data System, 2006). Since 1980, the sharpest rise in the number of new cases of ESRD was found among Asian Americans and Pacific Islanders (Mau et al., 2007). Unfortunately, few studies have examined the impact of CKD and ESRD in Native Hawaiians and other Pacific Islanders by age and thus, insights as to the underlying burden among the elderly are limited. In lieu of elder-specific data on CKD, it is likely that one of the leading causes of ESRD and CKD in this elderly population of Native Hawaiians and other Pacific Islanders is diabetes.

*Summary*

- Native Hawaiians and Pacific Islanders are at increased risk for developing CKD and ESRD.
- Diabetes is the most common cause of ESRD for all racial/ethnic groups including Native Hawaiians and other Pacific Islanders.

(PATTERNS OF HEALTH RISK CONT'D)**Arthritis, Gout & Hyperuricemia**

According to the Hawaii State Department of Health Behavioral Risk Factor Surveillance Survey (BRFSS), 41.4% of Native Hawaiian older adults (age 65 years and older) said that they had been told by a doctor or other health professional that they have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. This percentage is comparable to the rates of self-reported arthritis among Caucasian older adults (47.5%) (Salvail FR et al, 2003). Not surprisingly, among very elderly Palauans (86 years of age and older), arthritis was reported to be the most common chronic illness (Jensen & Polloi, 1984, 1988).

Data on the prevalence of gout and hyperuricemia among elderly Native Hawaiians and Pacific Islanders is not available. In the general US population, the prevalence of gout is 2.7% (Centers for Disease Control and Prevention, Accessed August 24, 2007a). By comparison, on the Pacific island of Nauru, clinical gout in men was reported to be 6.9%, while less than 1% of women were affected (Zimmet, Whitehouse, Jackson, & Thoma, 1978). The same study found that 64% of men and 60% of women aged 20 years or older had hyperuricemia. The prevalence of asymptomatic hyperuricemia was also relatively high among Polynesian women with a prevalence of 44%, possibly due to a genetic defect in renal urate handling and/or a high prevalence of the insulin resistance syndrome in Native Hawaiian and Pacific Islander populations (Simmonds et al., 1994; Zimmet et al., 1978).

**Summary**

- Native Hawaiian elders have similar rates of self-reported arthritis (degenerative and inflammatory) compared to elderly Caucasians.
- Native Hawaiians and Pacific Islanders are reported to have higher rates of gout and hyperuricemia, some of which may be attributable to genetic variations and/or the insulin resistance syndrome.
- Little is known about the prevalence of these conditions specifically among the elderly.

Cancer

Native Hawaiians tend to be diagnosed with cancer at younger ages than their Caucasian counterparts. For example—

- More Native Hawaiian women (54%) had their breast cancer diagnosed at age less than 60 years compared to 49% of all Caucasian women with breast cancer (Braun, Fong, Gotay, & Chong, 2004).
- Native Hawaiian patients with bladder cancer were also detected at younger ages according to a 2003 study in which 30.7% of Native Hawaiians were diagnosed prior to age 60 years old compared to 21.9% of Caucasians (Hashibe, Gao, Li, Dalbagni, & Zhang, 2003).
- Elderly Asian or Pacific Islander women were found to have nearly double the incidence rate for invasive cervical cancer compared to Caucasian women (21.8 per 100,000 versus 12.6 per 100,000) (Saraiya et al., 2007).
- Finally, female Native Hawaiian older adults (age = 60 years) have also been reported to have up to 20% lower five-year breast cancer survival compared to the group with the highest proportion of survivors, Japanese women (Braun et al., 2004).

(PATTERNS OF HEALTH RISK CONT'D)

A summary of cancer prevalence by cancer site and geographic location for all other Pacific Islanders is shown in Table 1. Of the twelve different cancer sites listed, the Marshall Islands reported the highest prevalence of cancer for four sites: breast, cervix, other/Genitourinary (GU), and thyroid.

It is possible that the higher prevalence of cancer cases in the Marshall Islands may be due to the US nuclear testing program (1946-1958) that led to widespread radiation exposure among Marshall Island residents. The most serious exposure was a consequence of the hydrogen-thermonuclear bomb test, Castle BRAVO, which resulted in higher cancer risk among Marshall Island residents, particularly for thyroid cancer. Surviving Marshallese residents of this nuclear testing program are currently elderly and increased risk of thyroid and potentially other types of cancer remains a significant consideration for this sector of the population (Howard, Vaswani, & Heotis, 1997; Takahashi et al., 2003).


Patterns of cancer occurrence may also differ between racial groups residing in the Pacific region (Mishra, Luce-Aoelua, & Wilkens, 1996). American Samoan males residing in Hawaii have a relatively higher frequency of lung, prostate, thyroid, and liver cancers and a lower frequency of colon and rectum cancers compared to other Polynesians such as Western Samoans and Native Hawaiians. Relative to other Polynesians, American Samoan women have a higher frequency of leukemia and corpus uteri, thyroid, and pancreatic cancers, although, like their male counterparts, they have a lower frequency of colon and rectum cancers.


**Summary**

- Few studies are available on patterns of cancer occurrence among elderly Native Hawaiians and Pacific Islanders.
- In general, Native Hawaiians tend to be diagnosed at a younger age and experience lower survival rates compared to other racial groups.
- Among other Pacific Islanders, Marshallese have the highest prevalence of breast, cervical, other/GU and thyroid cancers compared to other Pacific Islanders which may be due to effects of US nuclear testing in the region during the 1950s.

For more information on cancer types and rates in all other Pacific Islanders, see Table 1 on the next page.

(PATTERNS OF HEALTH RISK CONT'D)

 Cancer Prevalence by Cancer Type in Micronesia 1985–1998 (adjusted to world standard population)								
CANCER SITE	CHUUK	KOSRAE	POHNPEI	YAP	BELAU	KIRIBATI	MARSHALL ISLANDS	NAURU
Breast	7.9	11.5	10.7	15.6	17.1	8.0	36.0	15.4
Cervix	4.8	33.4	24.8	13.1	37.5	4.5	60.5	55.0
Gastric	3.0	17.6	7.7	1.1	1.6	2.2	2.9	10.7
Hematologic	2.2	2.6	4.7	2.7	6.0	2.9	4.7	3.2
Liver	5.2	4.1	11.9	24.4	19.4	0.5	10.2	5.7
Lung	24.6	8.7	21.3	39.6	34.6	4.4	4.1	42.8
Oral	3.8	7.9	6.2	22.1	12.4	2.4	12.6	3.6
Other/GI	3.6	30.9	5.9	15.6	12.8	5.0	20.1	33.4
Other/GU	6.0	8.0	8.2	5.8	13.8	5.9	21.8	10.3
Other/Unk	13.7	13.5	11.9	33.2	26.4	14.0	22.2	48.9
Prostate	2.5	10.9	4.9	14.0	74.9	1.3	9.3	2.9
Thyroid	2.6	1.6	3.0	2.6	4.2	1.2	28.6	*
YEARS	1985–1997	1990–1998	1985–1997	1985–1998	1985–1998	1989–1998	1985–1998	1985–1998

 = Highest cancer prevalence by cancer site

* No cases reported

Note: Number of cases per 100,000 population, age-adjusted to WHO world standard population, annualized.

Source: Palafox et al., 2004, reprinted with permission

(PATTERNS OF HEALTH RISK CONT'D)**Mental Health**

Asians and Pacific Islanders are known to under use mental health services (Browne, Fong, & Mokuau, 1994). Consistent with low utilization of mental health services, Native Hawaiian older adults have a relatively low suicide rate of 35 per 100,000, approximately half the overall rate of the entire state of Hawaii (64 per 100,000) (Kanaiaupuni, Malond, & Ishibashi, Accessed August 22, 2007).

Similarly, among Palauans 90 years of age and older, the occurrence of mental illness was reported to be infrequent (Jensen & Polloi, 1988). By contrast, another study found that elderly Asian Pacific Islanders have poorer mental health compared to Caucasian older adults. In this study, the authors also found within-group differences and concluded that recent immigrant groups and colonized populations were at highest risk for mental health problems (Browne et al., 1994).

Among persons aged 65 and older, the estimated US prevalence of dementia ranges from 6-9% (Galasko et al., 2007). However, among Guamanian/Chamorros, the point prevalence of all-cause dementia was 12.2% (Galasko et al., 2007). In Guam, a distinct syndrome termed the “parkinsonism-dementia complex” (PDC) has been described as a neurodegenerative disorder identified only in Chamorros (Galasko et al., 2007).

The prevalence of the PDC syndrome, which is clinical equivalent to Alzheimer’s disease but presents with Parkinsonism in addition to dementia, was 8.8% (Galasko et al., 2007; Winton et al., 2006). Palauans 90 years of age and older were found to have a 25% prevalence of mild dementia and a prevalence of 42% for moderate or severe dementia (Jensen & Polloi, 1988).

**Summary**

- Utilization of mental health services by Native Hawaiians and other Pacific Islanders is low compared to Caucasians.
- Suicide rates in Native Hawaiians and Pacific Islander elders are lower than Caucasian elders.
- Individuals at highest risk for developing mental health problems are reported to be those individuals who are immigrants or who are from colonized populations (i.e. Native Hawaiians, Marshallese, etc.).
- Dementia disproportionately affects some Pacific Islanders and is reportedly 2-fold higher compared to Caucasians.

Substance Abuse

Smoking prevalence is high among Native Hawaiians and particularly among other Pacific Islander populations. For example, the prevalence of smoking among Samoan and Chuukese men is reportedly greater than 50% (Lew, 2004). Data on elder-specific rates of smoking is limited.

Among Native Hawaiian older adults, compared to Caucasian older adults, a higher percentage of Native Hawaiian older adults reported smoking every day or some days (14.2% versus 8.9% respectively) (Salvail FR et al, 2003). By contrast, Native Hawaiian older adults were at overall lower risk for binge drinking (defined as having five or more drinks on one occasion) or heavy drinking (more than two drinks per day for men, one drink per day for women) than Caucasian older adults (Salvail FR et al, 2003).

Methamphetamine use is reportedly higher among Native Hawaiians living in Hawaii (Joint House-Senate Task Force on Ice and Drug Abatement, 2004). Unfortunately, little is known of the risk of methamphetamine or other illegal substance abuse in the older adult population. Recent reports from at

(PATTERNS OF HEALTH RISK CONT'D)

least one Native Hawaiian homestead community have cited illegal drug use in their community as negatively impacting the elderly population because they often own the residence where illegal drug use or transactions are occurring (Kekauoha, July 2004).



Summary

- Other Pacific Islanders have a high prevalence of smoking. A lower percentage of Native Hawaiian elders report smoking every day or some days compared to Caucasian elders, although by contrast, binge drinking among Native Hawaiian elders is lower than Caucasian elders.
- The availability of data on illegal substance abuse among Native Hawaiian and Pacific Islander elders is limited although these elders may be negatively affected by high rates of illegal substance abuse among other family members.

Infectious Diseases

Few studies are available on Native Hawaiian and Pacific Islander older adults and risk for infectious diseases. However, leprosy is one of the unique infectious agents that may be seen among Native Hawaiians and other Pacific Islanders (all age groups).

Nationally, Hansen's disease (leprosy) is rare with a total of only 96 new cases reported in the United States in 2002 (Centers for Disease Control and Prevention, Accessed August 24, 2007b). Although annual rates for all forms of Hansen's disease in French Polynesia have decreased since 1946, the rates are still relatively high (8.1 per 100,000 population in 1987) compared to other states in the US (Cartel et al., 1992).

Hansen's disease is also endemic in the Federated States of Micronesia with an incidence of 221/100,000 and a prevalence of 33/10,000 in 1996 (Matsuoka, 1997).

Beginning in 1996, chemoprophylaxis was introduced as part of a leprosy control program which identified a decreasing number of new cases in each successive round of screening (Diletto, Blanc, & Levy, 2000). Estimates of the elder-specific prevalence of leprosy in Native Hawaiians and Pacific Islanders are uncertain. However, the higher prevalence found in the Federated States of Micronesia and French Polynesia suggests that Native Hawaiian and other Pacific Islander elderly populations may also be at risk. Asian Americans and Pacific Islanders are known to have a higher prevalence of chronic Hepatitis B virus infections (10-15% versus 0.4% general US population) (Li-Ng, Tropp, Danoff, & Bini, 2007).

A 2007 study concluded that Hepatitis B virus infection is strongly associated with diabetes among Asian Americans but not among Pacific Islanders (Li-Ng et al., 2007). Further confirmation of this association is needed. In the meantime, the risk for Hepatitis B infection among Native Hawaiian and other Pacific Islander older adults remains unclear.



Summary

- Hansen's disease and Hepatitis B infection are relatively common infectious diseases that affect Native Hawaiians and other PIs.
- Among Native Hawaiian and Pacific Islander elders, the risk for these infectious agents are unclear but early screening to detect these infectious agents may be warranted for early treatment and prevention efforts.

Asthma

In the state of Hawaii, the prevalence of asthma among Native Hawaiian older adults is 5.8% (Florentina et al., 2001-2003b), which falls within the US prevalence range of 4-10% for asthma among the elderly (Arif, Rohrer, & Delclos, 2005).

CULTURALLY-APPROPRIATE GERIATRIC CARE: FUND OF KNOWLEDGE

Three important issues for effective geriatric care for Native Hawaiian and other Pacific Islander older adults are:

1. An understanding of their history is crucial to understanding the current health status and strategies for promoting the health
2. Knowledge of their health beliefs and practices
3. Knowledge of causes of illness and interventions

Historical Background

Westernization of Hawaiian Islands

In 1778, Captain James Cook was the first documented European to land on the shores of the Hawaiian Islands. With the arrival of Christianity came the overthrow of the kapu system, the laws that had governed interactions involving people, nature and the gods for hundreds of years.

The result was an overwhelming change in social structure and lifestyle. These changes, coupled with changes in diet and a significant loss of population due to the introduction of foreign diseases, had a long lasting and often devastating effect on the Native Hawaiian population (Bushnell, 1993; Kanahele, 1996).

Important economic and social changes took place over the following decades. Subsistence agriculture-based on communal lands was replaced with a western-style land tenure/ownership and capitalist economies based on sugar, lumber (sandalwood), ranching and whaling. Foreign economic and political control increased with the rise of those industries (Mitchell, 1992).

The culmination of foreign influence eventually resulted in the overthrow of the Hawaiian monarchy by a group of influential Caucasian businessmen, many of them American or of American descent, who then offered the Hawaiian Islands to the US government. Although the US did not initially accept this offer, the strategic

location of the islands in the middle of the Pacific and the onset of the Spanish American war settled Hawaii's fate. Despite strong objections by Native Hawaiians, the island nation became a US territory in 1900. By this time, the Native Hawaiian population had been permanently affected by a series of events (i.e. foreign infectious diseases, out-migration, etc.) that together had decreased the Native Hawaiian population by 87.5% since 1778 (Blaisdell, 1993).

Colonization of Pacific Islands

Micronesia

Micronesia includes the Republic of the Marshall Islands, the Federated States of Micronesia, the Republic of Palau (Belau), the US Territory of Guam and the Commonwealth of the Northern Marianas Islands. Historically, Micronesians descended from seafarers who populated the island atolls between 2000 BC and 500 BC.

Since the first contact with Westerners, starting with the Portuguese and Spanish explorers, the islands have been colonized by various European and Asian countries. For example, Pohnpei, an island state of the Federated States of Micronesia, was first "discovered" in 1526 when the Spaniards named it the "New Phillipines". Spain later "claimed sovereignty" over most of Micronesia. Germany was the official colonizer for one year before Spain formally occupied Pohnpei in 1866. Germany "bought" the island from Spain in 1899 after the conclusion of the Spanish American War. Japan annexed the island in 1914 and Pohnpei became a US territory after the defeat of the Japanese empire during World War II.

In 1979, Pohnpei joined three other island states to become the Federated States of Micronesia. The country has had a compact of free association with the US since 1982 (Ashby, 1993). A similar political history occurred for the Republic of Palau. Palau was "discovered" in

(FUND OF KNOWLEDGE CONT'D)

1710 by Spain. It too was sold to the Germans, annexed by Japan and later became part of the US-managed Trust Territory of the Pacific Islands after World War II. Independence came to Palau in 1994 and it has had a compact of free association with the US since 1994 (Barbour, 1995).

The island of Guam, also a part of Micronesia, was ceded to the US by Spain in 1898. Captured by the Japanese in 1941, it was retaken by the US three years later and today remains, along with Saipan and other neighboring islands, an unincorporated US territory. In the 2000 Census, 37% of the Guam population is native Chamorro (Central Intelligence Agency, Accessed September 2, 2007).

A sad legacy of World War II is the nuclear weapons testing that occurred in the Marshall Islands starting in 1946. Whole atolls were destroyed or made uninhabitable, populations moved away from their ancestral homelands, and ways of life were changed as the people were involuntarily exposed to radiation. Residual effects initially included radiation sickness, but later increased rates thyroid cancer as well as lung cancer, breast cancer, ovarian cancer, leukemia and lymphoma (Anderson et al., 2006).

Today, these island nations struggle with the legacy of the colonization and westernization of their island homelands. Social structures and ways of life are changing and diseases associated with western lifestyles such as obesity, coronary artery disease and substance abuse are having devastating effects (Kermode & Tellei, 2005).

Polynesia

The Polynesia triangular region stretches from Fiji and Tonga to the west, Easter Island to the east, Hawaii to the north and New Zealand to the south. Samoans are the largest population of Polynesians in the US after Native Hawaiians. The Samoan Islands were populated more than 2,000 years ago and subsequent migrations settled the rest of Polynesia further to the east. Contact with Europeans began in the early 1700s, but did not

“ Samoans are the largest population of Polynesians in the US after Native Hawaiians ”

intensify until the arrival of English missionaries and traders in the 1830s. At the turn of the 20th century, the Samoan islands were split into two sections.

The eastern islands became territories of the United States in 1904 and today are known as American Samoa. The western islands became known as Western Samoa (now the Independent State of Samoa), passing from Germany to New Zealand in 1914. The New Zealand government administered Western Samoa under the auspices of the League of Nations and then as a UN trusteeship until independence in 1962. Western Samoa was the first Pacific Island country to gain its independence (US Department of State, Accessed September 2, 2007).

Melanesia

Tonga was settled about 500 BC. The Dutch explorers visited in 1643 after the islands were sighted in 1616. By 1845, all of the Tongan islands had been united by ancestors of the current dynasty. Under British protection by 1900, Tonga retained its independence and autonomy and became fully independent in 1970 (US Department of State, Accessed September 2, 2007).

Fiji was settled by both Polynesian and Melanesian people around 1500 BC. Europeans arrived in the early 1800s and Fiji was ceded to Britain in 1874. Fiji became an independent nation in 1970 and today continues to struggle with the large immigrant population from India who came to Fiji as servants.

(FUND OF KNOWLEDGE CONT'D)**Traditional Health Beliefs****Native Hawaiian Values**

There are numerous cultural values important to Native Hawaiians. Those mentioned here were selected because they are often relevant or helpful in the healthcare setting. However, this is not meant to be an exhaustive list of Native Hawaiian values or beliefs.

Lokahi (balance)

Central to Native Hawaiian understanding of health is the concept of lokahi (balance or harmony). This is sometimes referred to as the “Lokahi Triangle”. Health is holistic. One is healthy when the physical, mental and spiritual parts of a person are all in harmony. These three “points of the triangle” include not only the physical body but also the environment surrounding that person, relationships with others, particularly family members, ancestors and god(s), as well as mental and emotional states.

“ Traditionally, healing for the physical body cannot occur without setting right any problems within the mental or spiritual realm. ”

Traditionally, healing for the physical body cannot occur without setting right any problems within the mental or spiritual realm. This requires spending time with the patient in order to get to know them and ascertaining the true origins of an illness. In addition, the patient has to be willing to take responsibility for the healing including making amends for any wrongs that they might have caused in the past.

“ Native Hawaiians need to feel that they are being respected and cared for if they are to be willing partners in the patient-physician relationship. ”

‘Ohana (family)

The extended family was the primary social structure for an ethnic Native Hawaiian. Many still live in multi-generational homes. Illness affects the entire family and therefore, family members need to be involved in the decision-making and treatment plans. This also ties in to the Hawaiian values of laulima (cooperation/helping) and kuleana (responsibility).

Aloha (love, compassion) and Malama (to care for)

Aloha has many meanings but the majority center around the concepts of love, caring and compassion. Native Hawaiians need to feel that they are being respected and cared for if they are to be willing partners in the patient-physician relationship. This entails the establishment of trust. In addition, Native Hawaiians feel a strong responsibility to “take care”, particularly of their loved ones. This concept is summarized in the saying, “aloha aku, aloha mai (give love, get love).” For example, you may find many Native Hawaiians living in large, extended families consisting of multiple generations. Grandparents may often be the primary caregivers of the children.

(FUND OF KNOWLEDGE CONT'D)**Values of Other Pacific Islanders**

Pacific Islanders share many of the same values as Native Hawaiians. For example, the Micronesian model closely follows the Native Hawaiian paradigm in that “family” can refer to multiple uncles and aunts, adopted brothers and sisters, and innumerable cousins (Palafox & Warren A., 1980).

Among Samoans, traditional Samoan culture still dominates the lives of its people. The basic unit of Samoan society is the aiga, an extended family system headed by a matai or chief. Kinship ties are important in many social and economic aspects of life. All who are related by birth or adoption are recognized as belonging to one aiga and each aiga may contain several hundred people (Palafox & Warren A., 1980).

Theories of Illness**Imbalance**

Traditionally, illness was thought to be the result of an imbalance in the three anchors of the lokahi triangle (physical, mental/emotional and spiritual). Healing traditions addressed all three and healing occurred in a very holistic way. Many Pacific cultures share these or similar beliefs. For example, in Palau, illness could occur from “ancestral-wrongness to the spirit” (Wong et al., 2004).

“ Traditionally, illness was thought to be the result of an imbalance in the three anchors of the lokahi triangle (physical, mental/emotional and spiritual). ”

“ Cultural historical trauma is the psychological, physical, social and cultural aftermath of the colonialism many indigenous people have experienced. ”

Effect of Historical Experiences on Health Care/Status

Many health disparities suffered by Native Hawaiians today are thought to have their origins in what is referred to as “cultural historical trauma” (Blaisdell, 1996). Cultural historical trauma is the psychological, physical, social and cultural aftermath of the colonialism many indigenous people have experienced.

This includes the loss of social structures, lands and ways of life, as well as the effects of racism and discrimination. The term also refers to the cumulative emotional and psychological wounding that seems to be carried forth into successive generations and affects all aspects of health. This “cultural wounding” can result in communal feelings of disruption and a sense of collective helplessness, which can in turn impact one’s “sense of self” and health seeking behaviors.

(FUND OF KNOWLEDGE CONT'D)

“ Studies in Hawaii and other islands have suggested that a return to traditional diets could help lower serum cholesterol, blood sugar levels and other obesity related conditions. ”

Studies in Hawaii and other islands have suggested that a return to traditional diets could help lower serum cholesterol, blood sugar levels and other obesity related conditions.

Specifically, Native Hawaiians have the highest incidence of morbidity and mortality and the highest age-adjusted mortality of any ethnic group in Hawaii (Anderson et al., 2006). As an example of how westernization has affected the lifestyle of many Native Hawaiians, consider how the traditional diet, which was low in fat and high in complex carbohydrates, has changed to a typically western diet, high in fat and low in complex carbohydrates (Blaisdell, 1993, 1996). Currently, the prevalence of obesity in Native Hawaiians is 69.3% (Anderson et al., 2006).

Studies in Hawaii and other islands have suggested that a return to traditional diets, focused on staples such as taro, breadfruit, and sweet potato, could help lower serum cholesterol, blood sugar levels and other obesity related conditions.

Micronesia offers another insight into the effects of dietary change. Instead of fishing and agriculture, many Micronesians have come to rely on the canned meat, shortening, and salty, canned fish that is readily available as a result of Micronesia's past “trust” relationship with the US. Consequently, rates of cardiovascular disease, obesity and diabetes are all increasing (National Institutes of Health & National Heart Lung and Blood Institute (NHLBI), 2000).

Traditional Health Practices

Native Hawaiians and Pacific Islanders often seek the services of traditional healing practitioners (Palafox & Warren A., 1980). For Native Hawaiians, some of the commonly used traditional healing practices include

- lomilomi (massage),
- la‘au lapa‘au (herbal or plant based healing),
- la‘au Kahea (prayer) and
- ho‘oponopono (conflict resolution).

Practitioners will invoke some or all of these components in their practices. All traditional healing practices involve prayer, the acknowledgment that healing comes from a higher power or god, a willing patient and the attempt to bring the patient back into balance or harmony.

CULTURALLY-APPROPRIATE GERIATRIC CARE: ASSESSMENT

“ An important caveat to assessing the elderly patient about his/her cultural perspective is to avoid ‘grouping or labeling’. ”

Population Diversity

The Native Hawaiian and other Pacific Islander population in the US is an extremely diverse racial and ethnic group with regard to identification with culture, work experience, socioeconomic status and education. This diversity extends into the geriatric population. For example, some elderly Native Hawaiians may be very familiar with Native Hawaiian traditional practices, customs and beliefs while other elderly Native Hawaiians may completely identify with Western culture.

The traditional Native Hawaiian older adult may speak the Hawaiian language and follow traditional practices and diet while the more Westernized Native Hawaiian older adult may have limited participation in cultural practices (i.e. singing Hawaiian music and eating traditional foods on special occasions only). Many in the latter group grew up during the time that Hawaii was a US territory and Native Hawaiians were trying to assimilate with the American way of life. As Hawaii tried to attain statehood, anything Western or American was perceived as “better” and anything Native Hawaiian was inferior or “less than desirable”.

Native Hawaiians were frequently subjected to discrimination and their children were discouraged from speaking the Hawaiian language as well as practicing any cultural activities. Not surprisingly, many of these traditional practices went “underground”.

This recognized diversity in the lived experience of Native Hawaiian older adults requires that the elderly Native Hawaiian patient be individually assessed

for their health beliefs and knowledge during the interviewing process. An important caveat to assessing the elderly patient about his/her cultural perspective is to avoid “grouping or labeling” the patient because this may inadvertently diminish the person’s individuality, and doing so risks establishing a less than ideal patient-physician relationship.

In addition, it is important to keep in mind that many Native Hawaiians are multicultural, i.e. of mixed ethnicities, and thus may identify with more than one ethnic or racial group.

Similarly, other Pacific Islanders who have lived away from their island homes for extended periods of time (including subsequent generations who may have been born in the United States) will be more acculturated to an American way of life, and may have adopted many beliefs associated with Western cultures. By contrast, those who have emigrated more recently are more likely to hold onto cultural traditions even if in a reminiscent way. Unlike Native Hawaiians, these recent immigrant populations tend to retain much of their traditional culture, language, and belief systems.

In general, other Pacific Islanders in the US are a young and fast growing population. **In 2000, nearly three-quarters (73%) of Pacific Islanders in the US lived in Western states,**

- 58% in California and Hawaii,
- 14% in the South,
- 7% in the Northeast, and
- 6% in the Midwest (Aiu, Ono, Burgess, Takahashi, & Kameoka, 2001).

In 1989, 17% of Pacific Islanders lived at or below the federal poverty level compared to 14% of Asian Americans/Pacific Islanders overall. Additionally, approximately a quarter of Pacific Islanders over age five spoke more than one language at home, indicating that Pacific Islanders are, in general, a bi- or multilingual population.

(ASSESSMENT CONT'D)**Important Cultural Issues**

Remember: Native Hawaiians and other Pacific Islanders are a very diverse group. It is important to avoid stereotyping. The following is offered only as a guide to be considered when initially assessing the individual elderly Native Hawaiian or Pacific Islander patient and may not be universally applicable to all patients.

Approach to the Elderly Patient

In order for the clinical interaction to be meaningful, Native Hawaiians and other Pacific Islanders need to develop a sense of trust with their health care providers. Native Hawaiians may initiate this process by trying to establish a “connection” with their physician or health care provider. This connection may involve questions regarding your genealogy, about the community you live in, the school you attended or where you have worked. Not uncommonly, Native Hawaiian patients will start off the encounter by asking questions, trying to “find that connection”.

For example, they may ask, “Where are you from?” They might be interested in seeing if you grew up in the same home town or if you know any of their relatives. Providers should be aware of this need to establish a “personal connection” and be open to responding to this interaction if they hope to establish a relationship based on trust. Physicians should make an effort to answer questions and even assist the patient in trying to find a connection. This is a critical part of the initial encounter and physicians should not rush through it in the hopes of getting to the medical interview.

Native Hawaiian older adults or *kupuna*, as with many other indigenous people, are held in high regard within their community. To develop rapport with the patient and/or the family, the health care provider often must be able to demonstrate a similar level of respect for the elderly patient.

It is permissible, if not necessary, to simply ask the patient how they prefer to be addressed. Initially, do not appear too casual (do not start off with calling them

“ Providers should be aware of this need to establish a ‘personal connection’ and be open to responding to this interaction if they hope to establish a relationship based on trust. ”

by first names) unless invited. Many older adults may prefer to be addressed as “Aunty” or “Uncle” regardless of the fact that they may not be directly related to the interviewer. Using these terms allows the physician to come into the patient’s world at their level. Native Hawaiian patients, like many other minority patients, value physician qualities such as being friendly, personable, thorough and most importantly, taking the time to listen and explain.

Family Involvement

When it comes to describing the illness or the treatment plan, it is best to involve the family in discussions and the decision-making processes. Taking the time to educate the patient and family goes a long way towards developing trust and patient rapport (Mau et al., 2003). It may be more challenging to communicate with the patient if English is not their first language and an interpreter may be needed. Usually this is a family member, many times a young child. In Native Hawaiian and Pacific Islander cultures, out of respect for their elders, it may not be appropriate for a young child to ask certain medical questions.

Caring for a Micronesian Patient

According to existing literature and clinical observations, when addressing an elderly Micronesian patient, it is appropriate to initially conduct your interview with the male (usually a male relative) who is present in the room. If he gives his approval to answer, the female or younger patient will then do so.

(ASSESSMENT CONT'D)

One needs to also ask permission of the patient to perform a physical exam, especially if touching the abdomen, pelvic area and thighs. For Micronesian women in particular, these areas are considered to be taboo and thus may need to be avoided in conversation with the elderly Micronesian patient.

Caring for a Samoan Patient

In caring for a Samoan patient regardless of age, the health care provider must realize that questions regarding sexual relations, venereal disease, or menstrual cycles are regarded as distasteful. Moreover, female Samoan patients may find it personally difficult to undress, even minimally, for a young Caucasian physician or other non-Samoan health care providers.

Questions dealing with family diseases and/or abnormalities of the genitals are usually not answered directly, as most Samoans are extremely private in these matters and consider it shameful to speak of such things. In caring for an elderly Samoan patient, show respect with a reassuring handshake and a smile.

If treated with respect, the elderly patient will in turn acknowledge and respect the physician for his/her medical authority. When addressing the family, there will usually be a spokesman, usually the most respected or the most educated person and the physician should address him/her (Palafox & Warren A., 1980).

Eliciting the Patient's Perspective

It is important to recognize that some patients may harbor mistrust related to their experiences as part of the political history with the US and other colonizing countries. To better assess the elderly patient's perspective about whether this may be an issue for him or her, you should ask the patient where he/she came from and the circumstances that brought him/her to the US. This background will most likely play a part in this patient's perspective on his/her healthcare.

CULTURALLY-APPROPRIATE GERIATRIC CARE: DELIVERY OF CARE



Remember: Native Hawaiians and other Pacific Islanders are a very diverse group. It is important to avoid stereotyping. The following is offered only as a guide to be considered when initially assessing the individual elderly Native Hawaiian or Pacific Islander patient and may not be universally applicable to all patients.

Preventive Care

It is crucial for the physician to educate their elderly patients about the importance of preventive screening. Although physicians should acknowledge the patient's feelings of discomfort, screening should be strongly encouraged as early detection can mean a cure in some cases (e.g. colon cancer, etc.). Unfortunately, some physicians find that Native Hawaiians appear late in the course of their illness and may interpret this to mean that the patient is apathetic about his/her illness.

Compliance/Healthcare Utilization

Establishing a relationship based on mutual understanding and trust will help to increase compliance with treatment. Take the time to answer questions, educate and explain. Involvement of the 'ohana is important to ensuring success.

Compliance may be adversely affected by health care access and limitations of insurance coverage. Many patients live in rural communities and/or rural neighbor islands and may not have access to primary care clinicians, specialists and hospitals (Taira, Gronley, & Chung, 2004). Native Hawaiians have one of the poorest socioeconomic conditions in the State. Barriers to care such as

- insurance status,
- ability to pay,
- homelessness,

- transportation,
- childcare, and
- school and work responsibilities,

must be considered when planning medical tests and treatment interventions. This is particularly important if the patient is dependent upon family members for transportation, medication, housing and food. Costs for medications are sometimes weighed against other family expenses such as food, rent and utility bills.

Non-compliance may also be a consequence of abandoning medical treatment in favor of traditional remedies, especially if the patient's condition does not improve immediately with conventional medical treatments (Palafox & Warren A., 1980).

Traditional Healing and the Use of Traditional Healers

Patients may be reluctant to tell their physician that they are seeing a traditional healer for fear of angering or alienating their "Western" doctor. However, if asked, many will readily confirm their participation in traditional healing practices. Patients may alternate between Western medical treatment and traditional healing. Some will remain with traditional healing practitioners until all else fails before seeking medical help from a doctor or a hospital.

Therefore, it is important to open this dialog early, not only to avoid unintended delays in treatment or diagnosis but also to assist the patient in understanding that the primary concern is to ensure the best possible approaches and outcomes for their health care issues, and to better understand their values and comfort levels with either method (Mau et al., 2003).

(DELIVERY OF CARE CONT'D)**Community Based Health Initiatives**

Native Hawaiians frequently prefer to access health services located within their own community or to engage in group-based health approaches. Group activities involving education, screening, exercise and the initiation of other lifestyle changes can facilitate both increased participation and success. For example, the Hawaiian Civic Clubs have actively been involved in providing health care screening for their members during annual meetings.

Community health workers, especially in rural communities, are invaluable members of the health care team as they are known and trusted members of the community and often have intimate knowledge of resources and challenges occurring at the local level. Whether these group-based approaches are sustainable over time is still unclear although anecdotal evidence suggests that naturally occurring support mechanisms vis-à-vis grass-roots communities can be effective in facilitating long term public health improvements.

Caregiver Stress

Native Hawaiian and other Pacific Islander families tend to keep their elderly relatives in the home with them. This can create caregiver stress as family members cope with Hawaii's high cost of living, work responsibilities and the needs of other family members. Interestingly, in Hawaii, 37% of caregivers are aged 60 years and older and Native Hawaiians represent 18% of all caregivers (Braun & Browne, 1998). In addition, Native Hawaiian grandparents are twice as likely as non-Native Hawaiian grandparents to be the main caregivers for their grandchildren (Anderson et al., 2006). Therefore, the elderly Native Hawaiian and Pacific Islander patient may actually be the ones experiencing "caregiver stress".

End-of-Life Preferences

As their elderly loved ones approach the need for end-of-life decisions, Native Hawaiian and Pacific Islander families frequently prefer to keep them in the home. In general, services such as home hospice and home care are welcomed. Because of the importance of 'ohana, all family members may want to participate in discussions regarding end-of-life decisions. However, elderly Native Hawaiian and Pacific Islander patients themselves may be reluctant to discuss a living will and/or durable power of attorney issues due to fears that talking about the subject out loud will hasten death. Unfortunately, without these documents or family discussions about these issues, conflicts among family members can arise, particularly if some members of the family have been estranged or have lived away for a number of years.

Cultural beliefs may even keep Native Hawaiians from agreeing to donate or accept organ transplants. Culturally, it is believed that your spiritual essence (mana) resides in every part of your body and is to be protected. Allowing access to your mana, in this case through organ donation, empowers those receiving the organs and lessens yourself and your family. For similar reasons, some elderly Native Hawaiians may be reluctant to be cremated.

INSTRUCTIONAL STRATEGIES: CASE STUDIES

Case Study 1

I. A geriatrician is working at a Veterans Affairs clinic. He sees a new patient, an elderly Native Hawaiian whose blood sugar is 400 mg/dL, and blood pressure is 220/150 mmHg. The patient has some difficulty walking because of arthritis in both knees.

The blood sugar and blood pressure are so high that the geriatrician wishes the patient to start treatment immediately and to return to the clinic every day until he is certain that the conditions are under control.

The patient listens carefully, but seems hesitant. He rarely leaves his home. He has never had health problems before except for knee pain and currently feels fine. He came to the clinic today only at the insistence of his granddaughter. He is unsure about a return visit.

What might the geriatrician do?

Answer: *The geriatrician should consider asking the patient if it is all right to bring the granddaughter into the office.*

II. The physician asks the patient if the granddaughter can join them in the exam room. The patient readily agrees. The granddaughter is willing to bring her grandfather back and to supervise the medication administration. However, she works most days and this is her only day off this week. In addition, he is home alone until the grandchildren come home from school.

What might the geriatrician do?

Answer: *The geriatrician may want to inquire about the availability of any other family members or suggest a family meeting to address how to best manage these potentially life threatening problems.*

III. The physician discovers that all of the family members work or go to school so he suggests a family meeting. The granddaughter agrees to try to arrange one for next week. In the meantime, she will try to take a vacation day tomorrow to bring him in. The geriatrician sees the patient in the office the next day. The patient seems more relaxed. He asks the physician many personal questions about his family, where he lives, where he grew up and things that he cares about, and yet seems disinterested in the physician's academic/medical credentials.

To the physician, this feels like an invasion of privacy, but he goes along with it because he is so worried about the patient's condition. The patient is excited to find out that his aunt is a next door neighbor. He visibly relaxes, agrees to take the prescribed medications and is willing to be enrolled in the Veterans Affairs' Home Care Program.

What happened in this encounter?

Answer: *To many elderly Native Hawaiians, trust must be established before deciding whether or not to accept your proposed treatment plan. Traditionally, treatment provided by a native healer involved spending time to get to know the person, not only the disease. Treatment was accomplished within the context of knowing the whole person, and was often highly effective.*

This allowed the patient and the practitioner time to establish trust and show respect. This process is often impractical in a western medicine clinic. In this case, a good alternative is the introduction of a home care team which can be effective as long as team members feel comfortable sharing some personal information about themselves and are willing to spend the time needed to educate and explain the treatment plan. Health care providers may also find that involving family members and setting aside some extra time to focus on the patient's concerns will be time well spent.

(INSTRUCTIONAL STRATEGIES: CASE STUDIES CONT'D)**Case Study 2**

I. You are a physician in a private practice. You see a retired 65-year-old Native Hawaiian-Chinese schoolteacher for a recheck after hospitalization due to asthma exacerbation. You discharged her on tapering doses of Prednisone, Singulair, Pulmicort, Zithromax and Albuterol MDI. She has a long history of asthma which worsened in the past six months. You suspect that stress has been a trigger; she is very active doing community service, has a limited income and has an unemployed daughter and two grandchildren living with her as the daughter goes through a divorce.

You ask her how she is doing and inquire about her family. She states that she is still worried about her daughter but the daughter has just found a part-time job and this will ease her financial stress. She replies that she is feeling much better with respect to her asthma. You ask her if she is having any problems with her medications. She hesitates and then says that she stopped her medications 2 days ago. You grow quite concerned at this news as her asthma has been worsening and she was just hospitalized.

What might the geriatrician do?

Answer: *In this situation, the patient has not followed your instructions. It is important to find out why this has occurred in order to understand how to improve adherence and, by extension, the patient's asthma. Consider questioning the patient in a nonjudgmental way, as a defensive patient might not give you the information you are seeking.*

II. You ask if she discontinued the medications because of side effects. She states that she did not have side effects, but that she was terrified of the Prednisone and could not afford the Singulair. She had heard that Prednisone could thin her bones and adversely affect her hormones.

What might the geriatrician do?

Answer: *The geriatrician might consider addressing the patient's fears first. Education is the key to addressing fear in this situation. Also consider a discussion surrounding the cost of medical care, including prescriptions and the impact it has on the patient's long-term health.*

III. You spend some time discussing the reasons for prescribing Prednisone, as well as the side effects of the medications. You answer her questions and try to reassure her. You discuss her individual illness and history. She replies that she understands the seriousness of her illness but wants to treat it her own way. She has done it before and has gotten better. You ask what she did and she tells you that she is seeing her acupuncturist again as well as a lomilomi (traditional healer) practitioner who is having her take some herbal preparations. You are unfamiliar with these healing methods and how they may interact with the medications you prescribed.

What might the geriatrician do?

Answer: *The geriatrician may be unfamiliar with the alternative treatment modalities being used by their patient. Consider asking the patient for more information or asking the patient for permission to speak with the traditional healer or alternative medicine practitioners. Consider asking how you might be able to find out more about these practices and whether their healer/practitioner would be willing to discuss your patient's care with you.*

(INSTRUCTIONAL STRATEGIES: CASE STUDIES CONT'D)

IV. You inquire as to the names of the preparations and how you could obtain more information about these types of treatment modalities and herbal preparations. You ask permission to speak with her acupuncturist and lomilomi practitioner and inquire if they might be willing to speak with you. Although you express your support for the patient's treatment course, you ask her to come in and see you more frequently so that you can monitor her progress. Should she fail to improve, you ask her if she would then be willing to follow your treatment protocol. You end by assuring her that, if needed, you will try to keep her medication costs to a minimum.

Case Study 3

A medical student is working in a clinic in Hawaii that frequently serves the indigent population and new immigrants. An elderly Micronesian woman who has recently immigrated to Hawaii is brought to the clinic because of a hypopigmented lesion on her face. It appears to be vitiligo.

However, to be thorough with the examination, the medical student tests the sensation in the lesion by touching it with a pin. The patient speaks no English, but they work out a system of communication whereby the patient clearly indicates when she does and when she does not feel the pinprick. She clearly does not feel the pinprick in the central part of the lesion. The medical student makes a diagnosis of Hansen's Disease (leprosy), and presents the patient to her attending physician.

The attending physician smirks at the medical student's "zebra" diagnosis and gives her a lecture about vitiligo, and common things being common. He then examines the patient himself, fully prepared to send the patient on her way. However, much to his surprise, he confirms the medical student's diagnosis!

Learning Points

- Hansen's Disease is still frequently seen in Pacific Island peoples. One needs to be cognizant of this fact and consider Hansen's Disease within the differential diagnosis of a skin lesion in someone who was raised in the Pacific region.
- To address this possibility, include an examination of the patient's sensory changes, as well as an examination of superficial nerves, looking specifically for nodules occurring over peripheral nerves (i.e. sural, ulnar nerves).

Case Study 4

A 65-year-old Marshallese woman comes into your office with complaints of not feeling well and abdominal pain. She is accompanied by a man who sits in the room and answers questions for the patient. The patient speaks very little English; her companion speaks some English and tries to translate your questions to the patient. When you ask a question about childbirth, whether there has been any vaginal bleeding, etc. he does not convey the question to the patient nor does he answer you.

What might the geriatrician do?

Answer: *You should realize that the companion is the spokesperson for your patient, and that she will not answer any questions without his permission. Very personal questions will usually not be answered. In this case, you may try to ask if there is another female that could help translate for your patient.*

Next, you want to examine the patient, but as you approach her, she is sitting up and holding onto her abdomen. What should you do?

What might the geriatrician do?

Answer: *You will need to ask permission from both the patient and the male in the room (who is there as her guardian) to look at and feel the patient's abdomen. The abdomen is a very private area and is not something commonly shared with others, even doctors. Sometimes there will be a female family member with the patient, but usually the patient is accompanied by a male family member.*

STUDENT EVALUATION

Objective Questions

For answer key, see page 32

1. To many Pacific Islanders, the needs of the group are more important than the needs of the individual.
 True
 False
2. Most Pacific Islanders have had relatively little contact with Europeans or Americans.
 True
 False
3. Pacific Islander older adults should initially be addressed by their first names.
 True
 False
4. Hansen's Disease (leprosy) has been completely eradicated in the Pacific region.
 True
 False
5. In Hawaii, Native Hawaiians suffer from the highest age-adjusted death rates from heart disease, cancer, stroke, accidents and diabetes.
 True
 False
6. When Native Hawaiians question you about your personal life, they are trying to distract you from their real problems and to interfere with the patient-physician relationship.
 True
 False
7. Cultural trauma is thought to be a major cause of many of the health disparities suffered by Native Hawaiians and other Pacific Islanders.
 True
 False
8. Even if Native Hawaiians and other Pacific Islanders don't mention it, they should be asked if they are using traditional medicines/healing modalities.
 True
 False
9. The Native Hawaiian concept of *lōkahi* focuses on having a healthy mind and a healthy body.
 True
 False
10. Making eye contact with a Micronesian older adult is an important way to show your respect.
 True
 False
11. Hepatitis C is seen more frequently in Pacific Islanders than Hepatitis B.
 True
 False

(STUDENT EVALUATION CONT'D)

- 12.** Native Hawaiians are more likely to comply with your treatment if you: (*choose ONE correct answer*):
- A. Prove that you deserve their trust based on your academic credentials.
 - B. Are quick, professional, and efficient, even if you may be a little impersonal.
 - C. Show you care by taking the time to “talk story” with them.
 - D. Both A and B.
- 13.** Common medical problems of elderly Native Hawaiians and other Pacific Islanders include: (*choose ONE INCORRECT answer*)
- A. Obesity
 - B. Type 2 Diabetes Mellitus
 - C. Valvular Heart Disease
 - D. Stroke
 - E. Suicide

**Answer Key**

1. True
2. False
3. False
4. False
5. True
6. False—actually trying to establish a relationship through finding connections
7. True
8. True
9. False—also need healthy spirit
10. False
11. False
12. C. Show you care by taking the time to “talk story” with them.

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