CHAPTER 5

Health Disparities

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OBJECTIVES

At the conclusion of this chapter, students will be able to:

- Define a health disparity.
- Describe how quality of care and access to care affect health disparities.
- Discuss how health disparities are determined and monitored.
- Identify various health disparities that impact diverse populations.
- Articulate which factors and policies contribute to health disparities.
- Discuss effective ways to intervene to decrease health disparities.
- Discuss the role of governmental organizations in decreasing health disparities.
- Describe why it is crucial to increase the involvement of diverse populations in health promotion research.
- Evaluate policy recommendations for reducing health disparities and identify policies that are most likely to have substantial benefit.

INTRODUCTION

Overall, the health, average life span, and quality of life of Americans have improved since the beginning of the 19th century. However, not all individuals have enjoyed these improvements to the same degree. Select populations experience a disproportionate disease burden. Significant health disparities in health outcomes, healthcare access, and healthcare delivery have been documented (Chin, Walters, Cook, & Huang, 2007; Center to Reduce Cancer Health Disparities [CRCHD,] 2004).

As you begin this chapter, consider for a moment the health trajectories of four women, each of whom were 45 years old, lived within a block of one another, and jogged together three times a week. The four women included a Black woman with three children and an 11th grade education, a White woman with two children and a high school education, a Hispanic woman with four children and a community college degree, and a Filipino woman with one child and a bachelor's degree. All of the women had either publicly-funded or privately-funded health care. Which women would be most at risk of problems associated with diabetes, heart disease, cancer, and asthma? Which diseases are most affected by genetic rather than lifestyle factors? In terms of life expectancy and quality of life, which women could expect to be the healthiest 30 years from now? You can check your answers by reviewing content summarized in this chapter.

Health disparities often are reported based on racial and ethnic groups; for example, Blacks, Hispanics, Native Americans/Alaskans, and Asians/Pacific Islanders have higher incidences or mortality rates for given conditions than do Whites. However, health disparities can also be associated with a geographic area (such as a rural area or inner city), gender, age, income, education, disability, or cultural and/or linguistic barriers to care. Other priority populations who are at-risk include those who lack a medical home (one consistent healthcare provider), those in need of long-term care, and individuals whose chronic disease is not well managed (Agency for Healthcare Research and Quality [AHRQ], 2003).

Disparities exist across the continuum of care in terms of prevention, access to care, and treatment. Failure to screen for risk, lack of primary prevention, failure to detect a disease, lack of follow-up for abnormal test results, nonadherence to treatment plans, unequal access to effective treatments, and lack of adequate palliative care resources are all common disparities. These disparities lead to higher incidence rates for a spectrum of diseases, delayed diagnosis, poorer response to treatment, and disease re-occurrence. Treating disease later in its progression typically results in higher healthcare costs and always results in higher emotional and social costs (CRCHD, 2004). A report of the Joint Center for Political and Economic Studies estimated the combined costs of health inequities and premature death in the United States to be 1.24 trillion dollars in 2006; these estimates were based on lost productivity and increased healthcare costs associated with delayed treatment (La Veist, Gaskin & Richard, 2009).

"Race and ethnicity have been found to influence quality of care, service delivery, disposition after treatment, . . . and intensity of care provided to hospitalized patients" (Shavers & Brown, 2002, p. 335). Treatment location and insurance coverage are also major factors that influence health disparities. Physician recommendations also are important and are shaped by "stage of disease, prognostic indicators, perception of the patient's willingness to comply with treatment recommendations," and various other factors (Shavers & Brown, 2002, p. 335). Patient decision making also influences health disparities. Patient participation in care is impacted by factors such as family and provider beliefs about treatment approaches, the ability to navigate the medical system, language barriers, cultural differences, and lack of transportation (Shavers & Brown, 2002).

DEFINITIONS OF HEALTH DISPARITIES

In 1999, one of the first definitions of health disparity arose from a White House initiative. At the request of the White House, the National Institute of Health (NIH) convened a working group that included representatives from all of their institutes. The resulting working group definition stated that "health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other diverse health conditions that exist among specific population groups in the United States" (CRCHD, 2011a).

United States Public Law 106-525, the Minority Health and Disparities Research and Education Act, was enacted in 2000 and authorized the National Center for Minority Health and Disparities at NIH to provide a legal definition of a health disparity. This definition stated that:

> A population is a health disparity population if there is a significant disparity in the overall rate of disease incidence, prevalence, morbidity, mortality, or survival rates in the population as compared to the health status of the general population . . . Included are populations for which there is a considerable disparity in the quality, outcomes, cost, or use of healthcare services or access to, or satisfaction with such services as compared to the general population. (CRCHD, 2004, p. 13)

Health equity was emphasized in this definition, as was the right that everyone has to conditions, resources, and supports needed to ensure health.

HOW DISPARITIES ARE DETERMINED

To determine if a health disparity exists or whether improvement is being made in eliminating that disparity, it is common to look at three health statistics: incidence (the number of new cases), mortality (the number of deaths), and survival rates (length of survival following diagnosis). When any one group of people has a higher incidence of a given disease, a higher mortality rate, or a shorter survival time following diagnosis, that discrepancy constitutes a health disparity (CRCHD, 2004).

> Both prevalence and incidence rates are considered when evaluating health disparities. The *prevalence* method estimates the consequences and costs incurred during a year . . . . This approach tallies all healthcare costs in a year . . . . The *incidence* method sums the direct and indirect costs of disease from its onset in a base year and for every subsequent year over the natural course of the disease. The total cost of disease

> equals the discounted sum of illness-related events over the lifetime of each individual with the disease. Incidence-based costing is based on life-cycle costs and therefore provides a more complete picture of the patient-level costs and baseline total costs against which new interventions can be assessed. But the incidence-based method requires a considerable amount of data, such as disease incidence, survival rates, long-term morbidity, and lifetime impact on employment. (CRCHD, 2004, p. 30)

Therefore, the *prevalence* method is the more commonly used approach because it requires less data.

TYPES OF HEALTH DISPARITIES

There are myriad health disparities, including those related to asthma, cancer, cardiovascular disease, diabetes, obesity, low birth weight, infant mortality, HIV/AIDS, mental health, and violence. Any listing of health disparities will inevitably be incomplete long before a book can be published; nevertheless, becoming familiar with common health disparities is a necessity. It is imperative that healthcare providers continually update their knowledge regarding which disparities affect which populations at any given point in time. A summary of several important health disparities are presented in **Table 5-1**, although the list is not meant to be all-inclusive. The data presented were extracted from profiles on the Office of Minority Health in the U.S. Department of Health and Human Services. All data are presented in comparison to non-Hispanic Whites and represent 2007–2008 figures.

After examining Table 5-1, imagine you are a legislator or on the board of a private health foundation that wants to allocate financial resources to decrease health disparities. Where would you allocate funds based on the highest health disparities? If you were considering the most costly health disparities in terms of lost productivity or overall healthcare costs, where would you focus the funding? In allocating funding, would you attempt to eliminate disparities for a particular disease or focus on improving education, income, or access to health care? Are there ethnic/racial groups who performed better on any of the given indicators than Whites or the U.S. population as a whole? What were those groups and indicators? Why are the disease incidence and mortality rates for White populations the norm against which other populations were compared? Is comparing incidence rates to White populations consistent with the NIH definition of health disparities? Why does Table 5-1 from the Office of Minority Health at the NIH include factors such as income, education, and insurance coverage? Provide a rationale for each of your answers.

TABLE 5-1 Health Disparities (2007–2008) Office of Minority Health, U.S. Department of Health and Human Services

Racial/ Ethnic Group	Income	Insurance Coverage	Education	% of Population	Cancer	Diabetes	Heart Disease	HIV/AIDS	Infant Mortality	Stroke
Black	Median income = $ 33,916. 24.5% living at the poverty level.	49% have employer sponsored insurance. 23.8% have public insurance. 19.5% were uninsured.	80% complete high school and 15% have a bachelor's degree.	13.5%	Males are 1.3 times as likely to have lung and prostate cancer and have lower survival rates; they are also twice as likely to have stomach cancer. Women are 34% more likely to die from breast cancer and twice as likely to have stomach cancer.	Adults are twice as likely to have diabetes and 2.2 times as likely to die from it. Males are 2.1 times more likely to have end-stage renal disease.	Men are 30% more likely to die from heart disease. Adults are 1.5 times more likely to have high blood pressure.	Males have 7 times the rate of AIDS and are 9 times more likely to die, while females have 22 times the rate and are 20 times more likely to die.	The infant mortality rate is 2.3 times higher. SIDS deaths are 1.8 times higher and mothers are 2.5 times more likely to not have prenatal care or to not begin to receive it until the third trimester.	Adults are 1.7 times as likely to have a stroke and are 60% more likely to die from it. Survivors are more likely to be disabled from the stroke.

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TABLE 5-1 Health Disparities (2007–2008) Office of Minority Health, U.S. Department of Health and Human Services *(continued)*

Racial/ Ethnic Group	Income	Insurance Coverage	Education	% of Population	Cancer	Diabetes	Heart Disease	HIV/AIDS	Infant Mortality	Stroke
American Indian/ Alaska Native	Median income is $33,627. 25% live at the poverty level.	36% have private insurance, 24% have public insurance, and 33% are without insurance.	76% have a high school education, 14% have a bachelors degree.	1.6%	Men are twice as likely to have liver or Intrahepatic Bile Duct (IBD) cancer. They are 1.8 times as likely to have stomach cancer, and twice as likely to die from it. Women are 2.4 times as likely to have and die from liver and IBD cancer and 40% more likely to have kidney cancer.	Adults are 2.3 times as likely to have diabetes and twice as likely to die from it.	Adults are 1.2 times as likely to have heart disease and 1.3 times as likely to have high blood pressure.	Adults have 40% higher HIV rates.	Infant mortality is 1.4 times higher; babies are twice as likely to die from SIDS. Mothers are 3.7 times as likely to not receive prenatal care or not begin to receive it until the third trimester.	Adults are 60% more likely to have a stroke.

TABLE 5-1 Health Disparities (2007–2008) Office of Minority Health, U.S. Department of Health and Human Services *(continued)*

Racial/ Ethnic Group	Income	Insurance Coverage	Education	% of Popu-lation	Cancer	Diabetes	Heart Disease	HIV/AIDS	Infant Mortality	Stroke
Asian Americans	Median income is $15,600 higher than the national average. 10% of Asians live at the poverty level and 2.2% receive public assistance.	84% have insurance coverage, although rates of private insurance vary from 76% for Vietnamese to 84% for Chinese. Public insurance rates vary from 3.8% for Chinese to 11% for Vietnamese.	86% have a high school diploma, which is equivalent to the overall U.S. rate. 50% of Asians, compared to 28% of the United States' overall population, have earned a bachelor's degree.	5%	Men are less likely to have prostate cancer than Whites. Adults have 3 times the incidence of liver and IBD cancer. Men are twice as likely and women are 2.6 times as likely to die from stomach cancer. Vietnamese females have the highest mortality rates for cervical cancer.	Asians are 30% less likely than Whites to die from diabetes.	Asians are less likely than Whites to get and to die from heart disease and are less likely to have high blood pressure.	HIV rates are increasing for Asians; however, they still have lower HIV/AIDS rates than Whites.	SIDS is the 4th leading cause of death among Asian infants.	Asians are less likely to die from stroke than are Whites.

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TABLE 5-1 Health Disparities (2007–2008) Office of Minority Health, U.S. Department of Health and Human Services *(continued)*

Racial/Ethnic Group	Income	Insurance Coverage	Education	% of Population	Cancer	Diabetes	Heart Disease	HIV/AIDS	Infant Mortality	Stroke
Native Hawaiians/Pacific Islanders	Median household income is $50,992	Not collected.	84% have high school diplomas, 10% have bachelor's degrees, and 4% have graduate degrees.	0.1%	Men are 40% less likely to have prostate cancer, and women are 30% less likely to have breast cancer. Adults have 3 times the incidence of liver and IBD cancer. Men are twice as likely and women are 2.6 times as likely to die from stomach cancer.	Native Hawaiians have twice the rate of diabetes as White individuals.	Hawaiians are 30% more likely to have high blood pressure, but less likely to have or die from heart disease, than Whites.	The AIDS case rate for HIV is twice that of Whites.	SIDS is the 4th leading cause of infant mortality.	The risk of stroke is less than in White populations.

TABLE 5-1 Health Disparities (2007–2008) Office of Minority Health, U.S. Department of Health and Human Services *(continued)*

Racial/ Ethnic Group	Income	Insurance Coverage	Education	% of Population	Cancer	Diabetes	Heart Disease	HIV/AIDS	Infant Mortality	Stroke
Hispanic/ Latino	55% of Hispanic households earn $35,000 or more. 21.5% of Hispanics live at the poverty level.	Hispanics have the highest rates of uninsured individuals (32%). Private insurance coverage varies from 58% for Cubans to 29% for Mexicans.	61% have a high school diploma and 12.5% have a bachelor's degree.	15%. Hispanics are the fastest growing group in terms of population.	Hispanic men are less likely to have prostate cancer and women are less likely to have breast cancer. Hispanic adults have a higher incidence and mortality rate for stomach and liver cancer. Women are twice as likely to have cervical cancer.	Adults are twice as likely to have diabetes, 1.5 times as likely to have end stage renal disease, and 1.6 times as likely to die from diabetes.	Hispanics are less likely to have heart disease than Whites.	Males have 3 times the AIDS rate as White males. Females have 5 times the AIDS rate as White women. Both women and men are more likely to die from AIDS than are Whites.	Puerto Rican infants are twice as likely to die from low birth weight as White children. Mexican American mothers are 2.5 times more likely to not receive prenatal care or to not receive it until the third trimester.	Hispanic adults are less likely to die of a stroke than White adults.

Selecting a Reference Group for Evaluating Disparities

The federal government considered three options in establishing a baseline from which to monitor progress in promoting health equity. First, they considered comparing a given group to the entire population. Second, they considered comparing a given group to the best performing group within the population. Finally, they considered comparing a given group with the largest fixed group. The option of a comparison to the largest fixed group was selected so that a stable baseline value could be chosen and each subsequent year's values would be measured against the same group. When the largest group is used, standard errors are the smallest. In addition, "unlike comparisons with the total population, groups are independent" when this largest group measured is used (AHRQ, 2003, p. 30). At the time of selection of this comparison group, non-Hispanic Whites, individuals at 400% or more of the federal poverty level, and college graduates were the largest fixed groups. "This choice of a comparison group was not meant to suggest that Whites or persons with high income or college education are superior or that disparities are an issue for racial and ethnic minorities or less affluent persons only. In fact, Whites and persons with high income or college education are not the best performing group in many instances" (AHRQ, 2003, p. 30).

Other Disparities in Prevalence

There are a variety of other disparities not mentioned in the earlier grid. Asthma morbidity and mortality rates are also "disproportionately high among ethnic minorities including African Americans . . . The striking ethnic disparities in asthma prevalence cannot be explained entirely by environmental, social, cultural or economic factors." Genetic factors are thought to play a role in asthma-related health disparities (Mathias, et al., 2009, p. 337).

Gay males are more likely than heterosexual males to experience depression, anxiety, and suicidal ideation. Lesbian, gay, and bisexual youth are more likely to have substance abuse issues, to attempt suicide, and to be at risk of being a victim of violence (Lewis, 2009). Hispanic injection drug users have a greater prevalence of hepatitis C than other groups (National Institute on Drug Abuse [NIDA], 2011). There are a greater number of Hispanic/Latino gang members (49%) compared to Black gang members (35%) or White gang members (9%), making Hispanic teens more likely to be at risk for homicide, which is a leading cause of death among 10 to 24 year olds.

Disparities in Quality of Care

Quality of care measures such as safety (avoiding harming patients by use of care that is intended to help them), effectiveness (provision of care based on scientific standards to all patients who might benefit but not those unlikely to benefit), patient-centeredness (care that is individualized, respectful, and responsive to values and preferences), and timeliness of care (reduced waiting times and delays in receipt of care) were identified by the Agency for Healthcare Research and Quality and the Institute of Medicine (IOM) as being critical in promoting health equity. They are also factors that illustrate disparities in the quality of health care among groups (AHRQ, 2003, p. 38). However, some have argued that it may be necessary to develop new measures of quality that are even more responsive to the needs of ethnic and minority populations (AHRQ, 2003), rather than using existing measures of quality that are applicable to the entire population.

There are multiple examples of disparities in quality of care. Hispanics and Blacks are more likely than other groups to suffer from diabetes and diabetes-related complications such as retinopathy, neuropathy, and leg amputations (AHRQ, 2003; Tirado, 2011). Twenty-nine percent of Blacks who smoke receive smoking cessation counseling while hospitalized, compared to 40% of Whites; this is in spite of the fact that smoking is the single most preventable cause of mortality. In another example, "[c]ompared to White adults (86%), Black adults achieve adequate hemodialysis less often (82%)" (AHRQ, 2003, p. 45). Hispanics who are hospitalized for acute myocardial infarction are less likely to receive optimal care (AHRQ, 2003). Twelve percent of Hispanics, 12% of Asians, and 8% of Whites are restrained in long-term care. Ten percent of Blacks and 8% of Whites in long-term care get pressure sores. Postoperative respiratory failure is higher in poor areas than near-poor areas and middle-income areas compared to high-income areas. Post-operative septicemia is higher among Blacks, Hispanics, and Asians compared with Whites.

When compared with Whites, Blacks are less likely to receive expensive or innovative treatments for cancer (Shavers & Brown, 2002). Blacks are also less likely to receive treatment for lung cancer and, when they do get treatment, less likely to get surgery (Shavers & Brown, 2002). Black, Asian, and Hispanic women "are more likely to be diagnosed at an advanced stage of breast cancer and have worse stage-for-stage survival than do White women" (Han et al., 2009, p. 247).

It is important to consider not only incidence rates and mortality rates for varied diseases, but also differences in treatments that are provided based on ethnic/racial background, income, and geographic location. It is also critical to consider when varied ethnic and racial groups access care and what barriers contribute to accessing care.

Disparities in Access to Care, Use of Care, and Cost of Care

Access issues include the ability to gain entry into the healthcare system, transportation barriers, the ability to schedule convenient appointments, feasible wait times, and the ability to obtain preventive and acute care. Issues of access to care also encompass the ability of providers to communicate effectively with patients by being culturally sensitive, attending to their language needs, and modifying teaching based on patient's health literacy needs.

Insurance coverage is a major factor that impacts access. Racial and ethnic minorities are less likely to have health insurance. Twenty percent of Blacks, 33% of American Indians, and 23% of Hispanics, compared to 12% of Whites, have public insurance. Individuals who are uninsured receive less preventive care, are diagnosed with more advanced disease stages, and have poorer health status. Individuals with lower incomes and less education as well as Blacks and Hispanics are less likely to receive routine health care and are more likely to receive acute care treatment. Hospitalizations for conditions that could have been treated in ambulatory care such as hypertension, angina, chronic obstructive pulmonary disease, and bacterial pneumonia are higher among Blacks and individuals of lower income (AHRQ, 2003).

Thirty-one percent of Hispanics, 26% of Blacks, and 20% of Whites have trouble receiving referrals to specialists. Twenty-nine percent of the poor, 26% of the near-poor, and 18% of those with higher incomes have trouble getting specialty referrals. Black, Asian, and American Indian women over 40 are less likely to receive mammography than non-Hispanic White women; lower income women are also less likely to get mammograms. Thirty-four percent of Asian women report not having a Pap smear, compared to 23% of Hispanic women, 18% of White women, and 16% of Black women. Ten percent of Blacks, 20% of Asian Pacific Islanders, and 17% of Hispanics receive a kidney transplant within 3 years of renal failure, compared to 26% of Whites. Sixty-three percent of the poor, 64% of the near-poor, 61% of middle-income patients, and 74% of high-income individuals with diabetes receive an annual retinal eye examination. Fifty-nine percent of Hispanics, 58% of American Indians, and 67% of Whites have had their cholesterol checked within the last 5 years. Fifty-six percent of the poor, 60% of the near poor, 67% of middle income, and 75% of high income persons have had their cholesterol checked, while 58% of individuals with less than a high school education, 69% of high school graduates, and 78% of those with a college education had their cholesterol checked. Hispanics and low income individuals are "more likely to experience difficulties or delays due to financial or insurance reasons or forego health care because their family needs money" (AHRQ, 2003, p. 75).

In general, ethnic and racial minorities are more likely to refuse treatment and to have longer periods from an initial abnormal screening to treatment initiation, both of which make them more likely to suffer from a variety of health disparities (Shavers & Brown, 2002). For example, a systematic review of ethnic differences in use of dementia care and provision of treatment showed that individuals from ethnic and racially diverse groups "accessed diagnostic services later in their illness and once they received a diagnosis, were less likely to access anti-dementia medication, research trials, and 24-hour care" (Cooper, Tandy, Balamurali, & Livingston, 2010, p. 193). Ethnic minorities were also more cognitively impaired and had a longer duration of memory loss at the time of diagnosis. They did not or were not able to access care at the same rate as White individuals with dementia (Cooper et al., 2010).

Language Fluency and Health Literacy

When considering health disparities it is vital to consider language fluency and how that can impact health literacy. Comparing people above the age of 5, 62% of Vietnamese, 50% of Chinese, 24% of Filipinos, 23% of Asian Indians, 42% of Native Hawaiians/Pacific Islanders, and 12% of Latino individuals living in the United States are not fluent in English. Fluency has a marked effect on communication between healthcare providers and patients as well as on health literacy, the ability to understand and follow a treatment plan, and health screening practices. For example, "non-English speaking Asians and Pacific Islander women living in the [United States] tend to have the lowest rates of Pap tests relative to women in other racial categories," a reality that is thought to be related to both health literacy and access barriers (Yu, Chou, Johnson, & Ward, 2010, p. 451).

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Overall, 75% of individuals with physical or mental health problems have trouble understanding their doctor's recommendations. Fifty-eight percent of Asians and 54% of Hispanics, compared with 40% of non-Hispanic Whites, report having trouble comprehending health information; broken down by education level, 60% of those with less than a high school education, 47% of high school graduates, and 36% of college graduates report having trouble understanding health information. There are also major sources of miscommunication, in that not all individuals believe that pathogens cause disease or that visions and communicating with dead ancestors are unusual. It is important to keep in mind that Western and Eastern healing philosophies differ greatly (AHRQ, 2003).

The Immigrant Paradox

Acculturation (adopting American norms and health behaviors) has a negative effect on blood pressure, cardiovascular risk, and mental health (Egan, Tannahill, Petticrew, & Thomas, 2008). Certain groups of immigrant women have better pregnancy outcomes than first-generation women born in the United States. The term "immigrant paradox" was coined to describe the fact that immigrant populations often have better health than U.S.-born individuals of the same racial and ethnic background. As years of living in the United States increase, health disparities also increase. "Adaptation to U.S. behavioral norms can lead to the adoption of nutritional, physical, and substance use behaviors that in turn lead to increased risk of common chronic diseases" (Williams & Mohammed, 2008, p. 157). In addition, discrimination and chronic stress associated with life in an industrialized society contributes to poor health (Williams & Mohammed, 2008).

One theory used to explain the immigrant paradox was that only the "healthiest" immigrants were physically, socially, and economically able to migrate (Gallo et al., 2009); however, that has been shown to not be the case. The concept of immigrant paradox highlights the importance of understanding protective social and cultural factors that contribute to resiliency and health in addition to simply focusing on cultural and ethnic differences that undermine health (National Institute of Child Health and Human Development, 2003).

Gender, Age, and Disability-Related Disparities

Women suffer higher morbidity rates than males even though they live an average of 6 years longer. Women are more likely to need long-term care, are at greater risk for Alzheimer's disease, more likely to experience depression, and are more often uninsured. In addition, lack of health care during pregnancy has long-term consequences for both the mother and the child. Childhood is a critical developmental stage and children are dependent on adults for access to care. Many children live in poverty; black and lower income children are less likely than White and more affluent children to receive childhood immunizations, and "[o]ver 1 out of 5 children spends some time being uninsured" (AHRQ, 2003, p. 167).

The percentages of poor (6.8%), near-poor (7.3%), and middle-income (2.8%) elderly who delay seeking care are higher than in high-income elderly groups (1.2%). Elderly individuals are more likely to have trouble obtaining specialty referrals than younger individuals and are also more likely to have trouble understanding health-related information (AHRQ, 2003).

Persons with disabilities, those who utilize long-term care, and individuals at the end of life face special challenges related to access to health care. Poor persons (11%), the near-poor (9%) and middle-income individuals (7%) who are disabled report greater challenges in getting to a healthcare provider than do higher income persons (4%) (AHRQ, 2003, p. 207). Nationally, 70% of Americans say they wish to die at home, although only 25% of deaths actually occur at home. End-of-life care provided in a hospital is costly: Up to "one-quarter of Medicare dollars are spent on 5% of beneficiaries in the last year of life" (AHRQ, 2003, p. 210).

Rural Populations

Access to care is limited in rural areas because there are fewer healthcare providers, transportation is more difficult in rural areas given that distances are greater and public transportation is more often lacking, and providers in rural areas are less likely to offer evening and weekend appointments. It is also more difficult to obtain referrals to specialists in rural areas. Many rural hospitals have closed or have experienced significant financial difficulties (AHRQ, 2003). Rural gang membership is greater than in urban areas: 17% of rural White teens belong to gangs as compared to 8% of those in cities (Egley & O'Donnell, 2009). White women living in Appalachia have a higher risk of developing cervical cancer (CRCHD, 2011b). In general, rural populations are less likely to engage in preventive health care and health screenings (Paskett et al., 2008).

FACTORS CONTRIBUTING TO HEALTH DISPARITIES

Numerous, complex, intertwined factors within and outside the healthcare delivery system contribute to health disparities. Factors associated with the healthcare delivery system that contribute to disparities include: (1) lack of insurance coverage, (2) the quality of health insurance and how consistently the patient has had insurance, (3) the availability of trained healthcare providers and healthcare facilities within one's geographic area, (4) ineffective provider–patient communication, (5) the degree of fragmentation within the healthcare system and lack of follow-up care, and (6) language and cultural barriers between providers and patients. Lack of insurance following loss of a job even, when it is followed by gaining access to insurance, can result in needing to locate a new care provider and cause disruptions in care during a critical period in terms of a person's health. High co-pays and deductibles can prompt individuals not to seek care. Lifetime coverage limits that are exceeded during a period of a major illness can also leave a person without access to care (CRCHD, 2004). Even in systems such as the Veterans Health Administration System and the Medicare program, where health care is provided to everyone, health disparities based on racial and ethnic background persist (Williams & Rucker, 2000).

Factors outside the healthcare delivery system that influence health disparities include age, gender, education level, socioeconomic status (SES), race and ethnicity, transportation barriers, problems taking time off from work for health care, childcare issues, lack of knowledge of appropriate health care, cultural beliefs that interfere with seeking health care, and lack of trust for healthcare providers and systems (CRCHD, 2004; Shavers & Brown, 2002). Issues such as access to good loans, the opportunity to earn a living wage, and fair hiring practices are also factors that affect health equity (CRCHD, 2004).

Socioeconomic Status and Stress

One of the strongest predictors of having a greater disease burden (or a health disparity) is socioeconomic status (SES). Income has an effect on access to education, occupation, health insurance, and living conditions (including exposure to toxins and violence), all of which contribute to health disparities. Socioeconomic status also has an impact on behavioral factors such as smoking, physical inactivity, obesity, and alcohol and drug use. It affects whether one can afford healthy, nutritious food or access a healthy place to exercise. Lower-income people have less access to preventive care, lower-intensity hospital care when hospitalized, and worse outcomes from cardiac and vascular procedures. They also receive lower quality ambulatory care. Disparities based on SES persist "across the life cycle and across varied measures of health, including health status, morbidity, and mortality" (Fiscella & Williams, 2004, p. 1139). Hahn and colleagues (1995) described the effect of poverty as being equivalent to the risk of cigarette smoking in terms of health. It is interesting that whether one measures SES based on income, occupational status, or wealth, the effect on health continues to be significant (Williams & Mohammed, 2008).

Stress, which is prevalent in lower SES environments, has a negative influence on health in that it increases allostatic load (Fiscella & Williams, 2004). Exposure to racial/ethnic discrimination also contributes to stress and poorer health outcomes (Egan et al., 2008). As much as 30% of the population has experienced bias and 60% of those who report experiencing bias report chronic, everyday discrimination (Kessler, Mickelson, & Williams, 1999). Factors such as social networks (friends, family, participation in organized groups, having a sense of belonging in the larger society), a sense of control at home or work, a balance between effort and reward, and security and autonomy also contribute to health or to stress (Egan et al., 2008). "Socioeconomic position is associated with the types and levels of stressors to which the individual is exposed, the availability of resources to cope with stress, and the patterned responses and strategies developed over time to manage environmental challenges" (Williams & Mohammed, 2008, p. 136).

When health disparities begin early in life they often have a lasting impact. The health of mothers and fetuses and their SES are closely linked. Fetal exposure to smoking and drug use have been linked to behavioral disorders in children. Exposure to less cognitive stimulation, family conflict, childhood abuse, and environmental toxins that can be experienced in low-income communities contribute to health disparities. Children of low SES are at greater risk of "death from infectious disease, sudden infant death, accidents and child abuse and . . . they have higher rates of asthma, developmental delay, learning disabilities, and conduct disorders (Fiscella & Williams, 2004, p. 1140). Research shows that preschool and school-age interventions programs can reduce health disparities that derive from low SES.

Low SES among adolescents is linked to higher rates of pregnancy, sexually transmitted disease, depression, obesity, abuse, dropping out of school, and suicide. Adults from low SES are likely to live 6 years less than someone with a college education. Elderly individuals with low SES experience "greater physical disability, greater limitations in activities of daily living, and more rapid cognitive decline" (Fiscella & Williams, 2004, p. 1141).

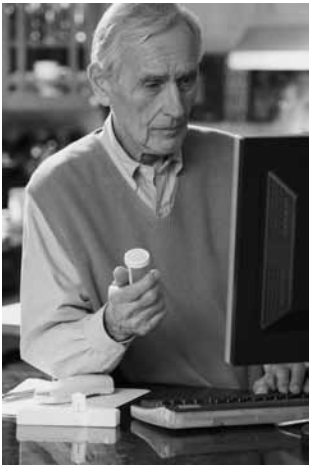
Income differences between low and high-income people constitute more than three times the difference in health between Black and White individuals and more than four times the difference in health between Whites and Hispanics. This reality highlights the importance that income plays in shaping health and explains why interventions such as providing free lunches for low-income children, food stamps, rental assistance, and other programs have been implemented (Williams & Mohammed, 2008; Pamuk et al., 1998).

INTERVENTIONS FOR MINIMIZING HEALTH DISPARITIES

When educating populations who experience significant health disparities, it is crucial to rely on the cultural expertise of members of the target group in designing educational materials. Nicholson and colleagues (2008) found that articles that report about progress in eliminating disparities about colon cancer are more likely to have a positive effect on health behaviors than articles that presented the reality that Blacks are doing worse than Whites or that Black outcomes are improving but at a slower rate than seen in White populations. The negative emotions reported in response to the ads that described Blacks as being more at-risk created resistance to the message and had a negative impact on health screening behaviors. The researchers reported that "the greater the amount of negative affective response, the less likely an individual was to want to be screened" (p. 2951). This was explained by the authors as such: "People tend not to believe, or view as prejudiced, information that threatens their self-concept or a favorable image of their referent group" (p. 2947).

Previous experience with discrimination has been associated with delays in seeking health care. Because of this, education should emphasize progress that is being made rather than highlighting the stark nature of disparities that exist. However, by emphasizing progress alone, attempts to obtain legislative action and programmatic funding may be hurt. Another approach is "impact framing," which involves describing the ways that a health disparity influences a patient, a family, and a given community. Impact framing makes the given disparity personal and illustrates why it makes a difference in the lives of the affected group (Nicholson et al., 2008).

Authors have also advocated for using information technology to enhance access to care and increase people's involvement in their care as a way to manage health disparities. Options include renewing one's prescription online, emailing a physician or nurse practitioner with a question, checking lab test results online, obtaining appointment reminders, receiving medication reminders, and using the Internet to obtain health-related information. The Internet has now surpassed physicians as the most popular health education resource (Gibbons, 2011). However, a study conducted at Kaiser found discrepancies among use of online options, in that 42% of Whites registered to use online services while only 30% of Blacks did so (Roblin et al., 2009). Diverse populations are more likely to be handheld wireless Internet users than are Whites, but it is unclear how to successfully promote information technology for the purpose of managing health in these populations (Gibbons, 2011).



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Fewer diverse healthcare providers have adopted electronic health records as part of their practice. The same is true for providers who primarily serve Hispanic patients, rural patients, the uninsured, or those on Medicaid. Electronic medical records allow for the monitoring of vital clinical parameters among groups who experience health disparities. Smart technologies that monitor glucose levels, weight, and vital signs can be connected to the electronic medical record so that a physician or nurse practitioner is notified of abnormal results from in-home monitoring. Such technology has the potential to narrow the health disparities gap by allowing for careful monitoring of disease progression. A barrier that needs to be addressed involves making sure that the health literacy needs of the given population are given adequate attention. Another question that needs to be resolved is whether lack of trust or a history of discrimination influences the acceptability of smart technologies among populations who experience health disparities (Gibbons, 2011).

Because disparities are often associated with diagnosis at an advanced disease state, increasing access to screening and prevention activities has been a priority (Shavers & Brown, 2002). On-time mammography, for example, is low among Hispanic and

Asian women. Interventions that involve community members who educate about the importance of health screening have been more successful in decreasing health disparities than has providing culturally specific and sensitive educational materials. The use of promotoras, or lay health advisors, has increased health-screening behaviors, and making low or no-cost mammography available via mobile vans or vouchers has also been effective (Han, et al., 2009).

It is crucial to tailor prevention and treatment approaches to the needs of specific cultural groups rather than to believe that improving the quality of the overall healthcare delivery system will reduce disparities. Policies that are aimed at increasing funding for prevention, screening, and access to health care are effective in minimizing health disparities. Bringing care to the communities, schools, and churches where people live is another viable option—for example, school-based primary health clinics have been effective in improving rates of immunization, providing health education, making mental health services accessible, and offering basic health screening in a nonthreatening environment. Scheduling difficulties, transportation barriers, and lack of trust toward health providers are minimized when care is provided in a familiar and comfortable setting. One limitation associated with offering care within community settings that needs to be modified is that many private and some public funding sources do not reimburse for care provided in these locations (Federico et al., 2010).

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Increasing the diversity of the workforce is an excellent way to reduce health disparities. Training all providers to offer patient-centered, holistic care is also a priority. Starfield (1992) suggested there are four vital components to consider when providing care to underserved populations: (1) providing first contact access to needed services (thus avoiding complicated referral policies), (2) ensuring continuity of care, (3) providing effective care coordination, and (4) offering comprehensive care that includes holistic interventions for needed physical, mental, and social issues. One way to accomplish these goals is to encourage the use of a medical home where the patient and provider are familiar with one another and a spectrum of services are provided at one location.

Cultural Competence and Patient-Centered Interventions

To minimize health disparities, nurses need to attempt to understand the people they work with (both patients and other healthcare providers) from the frame of reference of that person's culture. It is important to understand the values, traditions, religious views, likes, dislikes, rituals, behaviors, and beliefs that guide decision making in order to help improve a person's health. It is also necessary to have knowledge of prevention and incidence rates and treatment outcomes for varied diagnoses and populations. Being sensitive to different belief systems about disease causation and exploring whether the person relies on folk healers or herbal medicines allows a nurse to obtain a comprehensive history and select an intervention that is consistent with patient values. It is also critical to honor attitudes toward family involvement in care while navigating legal guidelines about respecting patient privacy and information sharing (Leninger & McFarland, 2002). Cultural competency has been defined as "a design, implementation, and evaluation process that accounts for special issues of select population groups (ethnic, racial, and linguistic) as well as differing educational levels and physical abilities" (AHRQ, 2003, p. 124). There are demonstrable links between cultural competence, quality of care, and elimination of racial and ethnic disparities (AHRQ, 2003).

Closely associated with the concept of cultural competence is the quality measure of patient centeredness mentioned by the IOM. Providers need to develop a partnership with patients and their families to make sure that a patient's needs and preferences drive healthcare decisions, that individualized care is provided, and that education is understood. Adequate patient–provider communication "increases awareness of risky behaviors, helps patients make complex choices . . . such as selecting the best treatment, . . . and increases the likelihood that patients understand and adhere to treatment regimens" (AHRQ, 2003, p. 120). It has been documented that American Indians/Alaska Natives (44%), Blacks (23%), Hispanics (33%), low-income populations (31% of poor, 25% of near poor, 17% of middle income and 13% of higher income individuals), and the less educated (30% of those without a high school education and 17% of those with some college) report poor communication with providers (AHRQ, 2003). "Compared to Whites (22%), Blacks (27%), Hispanics (34%), and Asians (41%), report being under-involved in healthcare decision making" (AHRQ, 2003, p. 122). Likewise, 30% of the poor, 26% of the near poor, 24% of middle-income patients, and 20% of high-income patients report feeling disenfranchised. Asians (55% of Chinese and 39% of Filipinos) are more likely to report that their doctor does not understand their background and values as compared to 40% of Whites (AHRQ, 2003).

A good first step in developing cultural competence is to understand one's own background, biases, beliefs, and traditions. This is actually more difficult than it appears to be. Articulating what one grew up with and what one just came to know is a bit like describing the wind. As Edward T. Hall (Hall & Hall, 1990) commented, culture hides more than it reveals. What it hides it hides most effectively from those who were raised in and live by certain cultural norms. Individuals who grow up from an early age in a given culture just learn what a given gesture, facial expression, or tone of voice means. It is hard to describe how close one should stand to another person in a professional setting but it is something that one learns by growing up in a given culture. Likewise, the role of women or elders or children often differs from culture to culture.

As challenging as it can be to identify one's own world view, begin by reflecting on the religious beliefs, kinship and social relationships, gender roles, economic factors, attitudes toward education, health rituals, traditional remedies, food preferences, personal space rules, and communication patterns that you were raised to believe in as a child. Did your family value being on time and see that cultural value as a sign of respect or did they focus instead on being fully present and attentive to whatever activity or person they were engaged with at the moment? How did your family care for you when you were sick as a child? Did your parents prepare special foods when you were sick? Think about patients whom you have cared for who were raised with different norms, different health beliefs, and different health practices than your own. To provide culturally competent care, a nurse must understand his or her own perspective and be able to bridge cultural differences.

CULTURAL COMPETENCE CASE STUDY

Review the following case study, based on incidents that occurred during a student's public health rotation. Consider what you would have done differently and the ways the student demonstrated cultural competence during her visits with her assigned patient.

> Nadiya, a 21-year-old Asian Indian woman of Punjabi descent who was in an arranged marriage, was referred to the public health department after giving birth to her second child. I called and set up a home visit. A thin, long-haired, pale-looking woman carrying an infant came to the door. Nadiya willingly answered my questions, but she would look at her sister-in-law before answering me. Did Nadiya look to her sister-in-law because she wanted to seek her sister-in-law's approval or was it because she was looking to see if she was paying attention to our conversation? The children's immunizations were up-to-date. Nadiya told me that she was tired due to waking up to breastfeed her baby. She was interested in birth control, specifically Depo-Provera, as she did not want to have any more children. Nadiya lived in the house with four generations of her husband's extended family: a paternal

great-grandfather; two grandparents, one brother, his wife, and their son; a sister and the 3-year old who was her son; and another unmarried sister—13 people in all.

I observed that Chandra, Nadiya's newborn daughter, had stopped breastfeeding and was lying in her mother's arms. I looked at her general appearance; she was resting quietly and staring out. I tried to get her attention; she did not look at me. The body language between this mother–daughter dyad seemed off. I had the uneasy feeling that something was not right. I made a mental note to make more assessments at the next home visit. I recapped the visit by mentioning the date and time that I would visit next week. When I rang their doorbell at 10:30 a.m. the following Tuesday, Nadiya was the one who opened the door to welcome me. With Nadiya's help, I took her children's head circumferences, lengths, and weights. The measurements appeared to be within normal limits. Nadiya repeated during this visit that she really wanted to use a birth control method. She emphasized that she did not want to have any more children. I asked her what her husband thought about this; she shrugged. Her reported height was 5 feet 1 inch and her weight was 96 pounds. Her plan was to breastfeed for only six months, just as she did with her first child. "It takes too much time; she gets hungry too soon," she reasoned. I looked at how Chandra was feeding at her mother's breast. She turned her face to her mother's breast and her body faced upward. I demonstrated how Nadiya could hold Chandra close, with her baby's tummy and most of her body facing Nadiya. "This will help prevent nipple pulling and soreness. It will also promote closeness with your baby," I softly told her. Nadiya had told me earlier that she liked to sing but she did not do it anymore. I encouraged her to talk and sing to Chandra while looking at her and making eye contact, with the explanation that it was important for language and speech development.

I was a tumble of emotions with each response Nadiya provided to my queries. Sadness, frustration, and anger were just some feelings that welled up inside me. Before her arranged marriage more than 2 years ago, she was a college sophomore taking Commerce in India. Nadiya came to the United States to follow her parent's wishes. I asked her if she had made new friends in this country. She shook her head. She did not know how to drive and relied on those in the household to drive her. She reported that she did not have a bank account and that she simply received a monthly allowance from her husband to spend for herself and her children. She did not know how much her husband earned. Neither did she know his level of education. Hearing this, I had to keep my emotions in check and not let these cloud my judgment.

When we reached the question about her plans for the future, Nadiya hesitated for a moment. "Any plans of going back to school? There's a community college nearby," I prompted her. She said that she wanted to improve her English by attending "English as a Second Language" classes. From there she wanted to continue her education and learn employable skills. Her husband, Kali, had told her that she had to stay at home to care for their children until they were a little older. She added that she also wanted to learn how to drive. "Being able to drive your children to school and help them with their homework is a good reason to tell your husband so that you can achieve your plans later on," I encouraged her. "I did not think of that; thank you for the suggestion," she replied. The next question on the list I asked her was, "Do you ever feel helpless or hopeless?" Nadiya hesitated before she nodded, "I sometimes feel lonely and down." I asked her if her husband or anyone else ever physically hurt her. She answered, "No, my husband does not physically hurt me." She pointed to her heart and her forehead and said, "Here; I'm sometimes affected here."

We scheduled our last visit for the following week. I was surprised when an older man opened the door for us. I introduced myself and he called Nadiya. After that, he promptly went upstairs. I found out that he was Nadiya's father-in-law. I completed a Denver II on Nadiya's older child, Amara. At 1 year, 3 months, and 12 days old on assessment, Amara's Denver II interpretation was "Suspect" with four cautions noted. She had failed to play ball with the examiner, drink from a cup, scribble, and walk backwards. Nadiya was not perturbed that Amara could not drink from a cup. She told me that she fed Amara herself because she did not want to clean up the mess. I encouraged her to allow self-feeding, with the suggestion that she place plastic or newspapers under the child when she was eating for easier clean-up.

I learned that all the adult males (her husband, his father, and brother), except the great-grandfather, took turns and came home only once or twice a week. They stayed and slept at their place of business (a gasoline station). Her mother-in-law would go to work daily and returned to sleep at the home. Nadiya did not get along with her mother-in-law. Her eyes widened as she complained, "She woke me up at 5:30 this morning because she was mad that I did something she did not like! I don't get enough sleep as it is!" It was the first time I saw Nadiya fired-up and angry. Her voice quivered as she said, "I won't be able to take it anymore if she slaps or hurts me. I am going to leave this house if that happens." I let her settle down a bit before commenting, "Yes, you should not let anyone hurt you. Would you like me to mail you information on resources to call or to go to if you feel unsafe or if someone has hurt you?" She agreed.

I had read that the impact of cultural assimilation into U.S. society and the practice of arranged marriages, the high regard for male infants (especially first-born), and a postpartum tradition of confinement can contribute to the development of postpartum depression in new mothers like Nadiya (Goyal, Murphy, & Cohen, 2006). I had to ask Nadiya sensitive questions to assess for this risk. "Are you under pressure to bear a son? How do the members of this family look at your daughters?" Nadiya nodded her head and bemoaned, "Yes, my husband wants me to bear him a son. What happens if I give birth to another girl? I do not want to take the risk. That is why I want birth control. " I touched her arm as she continued, "My husband's family plays with my daughters; but, my mother-in-law sometimes jokingly asks the girls why they were not boys." I could not help but clench my jaw. Nadiya added that her husband was more caring and approachable when they were newly married. "But now, when I talk to him about my situation with my mother-in-law, he just says that it's between me and her."

Almost everything I heard from Nadiya saddened and concerned me. Having found out that her husband was the eldest son in the family, I thought it would be very unlikely that she could suggest that they move into a place of their own. I did not even broach the subject with her. I simply provided guidance and teaching on various topics like her need to follow up with her provider regarding birth control options, the benefits of "tummy time" for Chandra, car seat safety, the importance of getting the seasonal and H1N1 flu shots, and how to make the home child-safe. As we were wrapping up, I happened to shake the bell (from the Denver II kit) behind baby Chandra's head, near her ear; there was no reaction. I tried again, to no avail. I placed her on her abdomen to see how high she could hold her head up. She could not raise her head up by 45 degrees. This was a gross motor milestone for a 2-month infant. When Nadiya placed Chandra on her lap facing us, I rang the bell again. This time, I could see a sharp spark of realization dawn on Nadiya as she herself flinched from the sound of the bell, "That hurts my ears; but she

> does not even react." She did not need pushing to know that she had to talk to the doctor about scheduling a hearing test. It was a good thing that she had changed her appointment to Thursday. She was worried. As I prepared her for the end of our working relationship, she said "I am so alone and sometimes I do not know what to do anymore." When I returned to the office, I emphasized that a public health nurse needed to continue providing services to this family (Personal communication, Mary Anne Sandoval, May 13, 2010).

How did this student demonstrate cultural competency or the lack thereof when working with Nadiya? Was there anything you would have done differently? What cultural norms influenced the treatment plan for Nadiya and her family? How did the short duration of the visits impact outcomes? What other priorities needed to be addressed?

Culturally and Linguistically Appropriate Standards for Health Care

There are national standards developed by the Office of Minority Health for culturally and linguistically appropriate healthcare services (CLAS); these were created from relevant laws along with input from healthcare providers, accreditation/credentialing agencies, and the public. The standards were developed to improve access to care, quality of care, and health outcomes and were issued by the U.S. Department of Health and Human Services in 2000 as a way of correcting current health-related inequities. The standards are focused on healthcare organizations and are required to be adhered to if federal funds are received. The standards are also used by legislators in developing laws, by agencies such as the Joint Commission on Accreditation of Healthcare Organizations, by the American Nurses Association to develop professional standards, and by educators to ensure their curricula are culturally competent.

According to the U.S. Department of Health and Human Services (2001), "cultural and linguistic competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations" (p. 2). Competence implies the ability to consider cultural beliefs, needs, and behaviors of patients when providing health care.

There are 14 CLAS standards. The first CLAS standard emphasizes the ability to provide understandable, respectful care that is compatible with the patient's cultural health beliefs, practices, and preferred language. This standard requires being familiar with traditional healing systems and, when appropriate, integrating them into treatment plans. Standard 2 requires healthcare organizations to recruit, retain, and promote diverse staff members that are representative of the service area. This standard covers the hospital leadership, governing boards, clinicians, and subcontractors.

Standard 3 requires that staff at all levels receive ongoing training about cultural and linguistic competence. This standard covers effective communication, techniques for conflict resolution, effects of cultural difference on health promotion, and the impact of poverty on health outcomes. Standard 4 requires that bilingual staff and interpreters be provided at no cost during all hours of operation to patients with limited English proficiency. Standard 5 requires that organizations post signs and make it known that language-assistance services are available. Standard 6 requires that translators demonstrate language competence and have 40 hours of training in cross-cultural issues. This standard discourages use of family members as interpreters and specifically states minor children should not function as interpreters. Standard 7 requires that patient-related materials (consent forms, handouts) and signs reflect the languages spoken in the service area. Standard 8 requires organizations to have a strategic plan and oversight mechanisms to ensure culturally competent care is provided. Standard 9 states that organizations should conduct ongoing self-assessments to determine that cultural and linguistic competence measures are included in performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations. This self-assessment is to focus on capacities, strengths, and needed areas of improvement (U.S. Department of Health and Human Services, 2001).

Standard 10 requires that data on race, ethnicity, and spoken and written language be collected from patients to ensure an equitable quality of care is provided. This standard mandates that information collected at registration is based on patient self-identification, not visual or observational categorizations. Standard 11 states that healthcare organizations should maintain an epidemiological profile of the community so they can plan to provide care that matches the needs of their service area. Standard 12 requires that healthcare organizations facilitate community and consumer involvement in implementing CLAS-related activities. Standard 13 states that conflict and grievance resolution processes must be culturally and linguistically sensitive. Standard 14 requires that the public be notified of progress the organization is making in implementing the CLAS standards. This can occur via newsletters, conference presentations, newspaper articles, television or radio presentations. or Web site postings (U.S. Department of Health and Human Services, 2001).

THE ROLE OF THE GOVERNMENT AND OTHER ENTITIES IN DECREASING HEALTH DISPARITIES

There is justifiable debate about "the appropriate division of responsibility between the individual, the public sector, and the private sector" in terms of minimizing health disparities (AHRQ, 2003, p. 2). Historically the federal government has played a key role in initiating dialogue about health disparities and in designing programs to minimize disparities. Anti-discrimination and access to care laws passed by the federal government, including the 1964 Civil Rights Act, the 1986 Emergency Medical Treatment and Active Labor Act, and the 2007 Antidumping legislation applicable to Medicare and Medicaid, as well as recent laws about the necessity of interpreters, are examples of how the government has intervened in a way that minimizes health-related disparities.

In 1999, the NIH identified health disparities as a research priority and in 2000 established the National Center on Minority Health and Health Disparities. This center has funded studies that examine how the role of genetics, daily living conditions, income, and education contribute to health disparities (Dankwa-Mullan et al., 2010). Each year the Agency for Healthcare Research and Quality publishes an annual disparities report covering disparities in access and quality of care (Chin et al., 2007). Affirmative action programs that are responsible for training diverse physicians, nurse practitioners, and nurses were mandated and funded by the government and have been responsible for producing 40% of diverse healthcare providers (Williams & Rucker, 2000). The Health Professional Shortage Areas and Medically Underserved designations identified by the Health Resources and Services Administration were designed primarily to minimize health disparities and increase the numbers of diverse practitioners (Chin et al., 2007). Healthy People 2010 and 2020 include goals that focus on the elimination of health disparities (AHRQ, 2003).

In 2003, the Institute of Medicine identified "equity as one of the six fundamental domains of high quality healthcare" (Chin et al., 2007, p. 8S). The IOM defined equity as the provision of healthcare of equal quality based solely on need and clinical factors. They published a landmark book titled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare,* which helped raise awareness about the sources of and solutions for health disparities. "Disparities at the patient, clinical encounter, and system levels" were discussed (Chin et al., 2007, p. 8S). The IOM report concluded that "to the extent that minority beneficiaries of publicly funded health programs are less likely to receive high quality care, these beneficiaries—as well as taxpayers that support public health programs—may face higher future healthcare costs" (U.S. Department of Health and Human Services, 2002, p. 116).

In 2005, the Robert Wood Johnson Foundation (RWJ), a private foundation, funded an initiative called the "Finding Answers: Disparities Research for Change," a program designed to identify, evaluate, and eliminate disparities associated with diabetes, depression, and cardiovascular disease. The RWJ Foundation sponsored research in these areas and studies that analyzed the effect of pay-for-performance and public reporting measures in decreasing health disparities. They created a searchable database (http://www.solvingdisparities.org) to describe the studies they funded. A summary of their funded studies concluded that culturally tailored interventions are more effective in reducing health disparities than are programs designed to be applicable to all groups of individuals. This body of research also supported studying diverse populations under everyday, nonexperimental situations that mirror real-world conditions rather than directing funding to randomized, controlled trials that may not mirror actual challenges that contribute to health disparities (Chin et al., 2007).

Why did the government—rather than researchers, professional organizations, private foundations, or community advocates—take the lead role in bringing health disparities to the forefront of dialogue and action in 1999? Why has this discussion about health disparities only recently become a priority when, in reality, health disparities have been present long before 1999? Is the government the most appropriate entity to assume a lead role in minimizing health disparities? What other entities need to be involved? Provide rationale for your answers to these questions.

RESEARCH AND EPIDEMIOLOGY: WHY DIVERSE POPULATIONS NEED TO BE COUNTED

Reliable and representative data on health disparities are a necessity if ethnic variations in access, treatment, and treatment response are to be understood. Adequate data are necessary if we are to identify areas of the greatest need, including "disparities that are responsive to improvements in health care," monitor trends over time, and discern which programs are successful in promoting equity (AHRQ, 2003, p. 2). Having sufficient data is especially important since there is a push toward evidence-based medicine, as well as reimbursement and allocation of resources that are tied to research evidence.

Without adequate numbers of individuals from varied groups participating in research or epidemiological surveys, sufficient statistical power cannot be achieved. In addition, it is difficult to detect and account for health disparities and to make a case for needed programs. Many studies and epidemiological databases have only included small samples of non-White populations, the elderly, the disabled, Asian/Pacific Islander individuals, and American Indian/Alaska Natives. In a number of large databases that are used to track health disparities, there are multiple entries where data on race and ethnicity is missing. The lack of consistency in reporting racial and ethnic categories and not allowing mixed race individuals to select a category such as "more than one race" significantly limits the information that is available for analysis.

"In addition, most private payer administrative data sources do not include race as a category" (CRCHD, 2004, p. 25).

After 2003, consistent federal standards for collection of race and ethnicity data were developed. Ethnic categories included Hispanic/Latino, non-Hispanic White, and non-Hispanic Black. Racial categories included White; Black; Asian; Native Hawaiian or Other Pacific Islander; American Indian/Alaska Native; and more than one race. The CLAS standards suggest one cannot "guess" an individual's background during admission to a healthcare facility. However, it continues to be the case that in a number of studies and registries, admission clerks record race and ethnicity data without asking the person to self-identify or provide their birth location, which is also a valuable data element. As one example of the magnitude of missing data, it has been estimated that one-third of American Indian and Alaska Native children are misidentified or not identified correctly, resulting in inaccurate death statistics (Epstein, 1997).

Socioeconomic status and level of education are not consistently collected, making it difficult to analyze the complex interactions that lead to health disparities. The National Healthcare Disparities Report (2003) recommended collecting SES data for (1) poor individuals below 100% of federal poverty level, (2) near-poor individuals whose income is 100 to 199% of federal poverty level, (3) individuals with middle incomes at 200 to 399% of federal poverty level, and (4) high incomes, which are 400% or more of the federal poverty level. These categories were suggested because differences between middle and high income people are significant in terms of health disparities (AHRQ, 2003).

Having an accurate baseline from which to gauge progress is vital. Many interventions and surveys have focused on Black and Latino populations, while other groups who experience disparities—such as pediatric and geriatric populations—are less frequently studied (Chin, 2007). At present it is not clear why disparities exist and which of the multiple contributing factors is most important. The complicated interrelationships between race, ethnicity, income, and education make analysis difficult. Data limitations have hindered efforts at minimizing health disparities (AHRQ, 2003), so it is vital to collect data on rural and urban areas and to track underutilization of services and high utilization of care, both of which can indicate poor healthcare quality. Given that different populations have different needs for service and different values, many have argued that measures are needed that capture the needs of specific racial, ethnic, age, gender, disability-related, and location-specific priorities (AHRQ, 2003).

It is necessary to recruit adequate numbers of diverse participants into large clinical trials to increase study generalizability and to reduce health disparities. However, it is difficult to recruit diverse participants because of a lack of trust regarding medical research, long questionnaires that impose high subject burdens and are not pertinent from the point of view of participants, extended follow-up periods that require long-term commitment, narrowly defined eligibility criteria for research participation, and a shortage of minority researchers who are skilled at recruiting diverse patients. Study recruitment is often not a priority for physicians and staff of busy clinics. Space for confidential interviewing is yet another barrier, as is obtaining a human subject's approval from multiple institutions if the study is a collaborative effort (Paskett et al., 2008).

Advantages for diverse populations participating in clinical trials include increased access to the newest treatments and technologies and having adequate data for the legislature to use when creating funding agendas and priorities. Solutions that have been suggested include use of a community advisory board, recruiting and explaining the study in a group format, using multiple recruitment sites, offering incentives for participation, establishing a toll-free number for participants to contact researchers, and creating personalized and culturally appropriate recruitment materials (Paskett et al., 2008).

Options for Monitoring and Simultaneously Minimizing Health Disparities

Several methods of monitoring and evaluating health disparities are also ways of minimizing disparities. The Surveillance Epidemiology and End Results (SEER) software is available on the National Cancer Institute Website. By using this calculator it is possible to explore cross-sectional and trend data (cancer rates, survival, stage at diagnosis) according to geographic area, SES, and/or race and ethnicity. Four absolute and seven relative summary measures of disparity can be calculated. It is a valuable online resource for designing research, intervening, and monitoring progress in eliminating cancer-related health disparities (SEER, 2010).

Another solution for minimizing health disparities involves increased funding for community based participatory research (CBPR). CBPR is a collaborative approach that begins with a research topic of importance to the community and adds academic knowledge "with a goal of promoting social change, improving community health, and reducing disparities" (Dankwa-Mullan et al., 2010, p. S 23). Rather than being a method, CBPR is an orientation that relies on equitable engagement of all partners throughout the research process from problem definition through data collection and analysis, to the dissemination and use of findings to help effect change" (Dankwa-Mullan, et al., 2010, p. S23).

FUTURE TRENDS AND ASSOCIATED COSTS

Although significant disparities exist, improvement is possible and necessary in order to contain healthcare costs and provide equitable care to the entire U.S. population. As Braveman and colleagues (2010) commented, "the health of the most socially advantaged group in a society indicates a level of health that should be possible for everyone" (p. S194). Many of the factors that contribute to health disparities are modifiable if, as a society, we adopt policies to promote equity and health.

However, "demographic trends indicate that the numbers of Americans who are vulnerable to suffering the effects of healthcare disparities will rise over the next half century . . . Some racial and ethnic minorities are growing at a much more rapid pace than the White population. Nearly 1 in 2 Americans will be a member of a racial or ethnic minority by the year 2050" (AHRQ, 2003, p. 1). In addition, the baby boomer population is aging and will place significant demands on the healthcare system. Beyond the human costs of health disparities, there are substantial financial costs that are borne by taxpayers associated with delayed and increasingly expensive treatment, costs that result in higher healthcare insurance premiums, and malpractice costs, as well as costs from months and years of lost productivity. Elimination of health disparities needs to be a top public policy priority (AHRQ, 2003).

HEALTH POLICY OPTIONS FOR REDUCING HEALTH DISPARITIES

If policies to reduce health disparities are not adopted, existing disparities will increase and quality of life for everyone will be impacted. Evidence indicates that disparities in access to, use of, and quality of care result in significant medical, social, and economic consequences (Schnittker & McLeod, 2005). A variety of health policy recommendations have been proposed for reducing health disparities, including:

1. expanding healthcare insurance coverage;
2. funding community-level interventions (community-based participatory research and education) specifically designed to reduce geographic differences in health;
3. empowering patients and family members to become more active partners in their health care;
4. facilitating coordination of care between care providers and systems of care by integrating health, social, and supportive services;

5. supporting pay-for-performance and public reporting of health outcomes;
6. funding more primary prevention activities;
7. conducting economic analyses to determine which interventions provide the highest level of benefit for the resources expended;
8. beginning by targeting the most preventable/curable diseases and diseases with the highest economic burden;
9. targeting groups with the highest need and amount of health disparity;
10. recruiting diverse providers and educating all providers to understand the culture and language of the communities that they serve;
11. using patient navigators, case managers, and promotoras
12. focusing on demand and supply level impediments (such as limitations on cigarette company advertisements);
13. reimbursing for evidence-based interventions known to be effective with given conditions;
14. providing reimbursement for care delivered via mobile health using information technology; and
15. activating shared cultural norms and practices when motivating behavioral change (Chin et al., 2007; CRCHD, 2004).

For example, the term cultural leverage, which is a focused strategy for improving the health of ethnic communities by incorporating their cultural practices and products into interventions, is commonly used. Values, rituals, music, and communication practices of varied racial and ethnic groups are taught to staff and incorporated into programs designed to foster behavioral change. It is thought that culturally tailored approaches work because they are the sine qua non of individualized care (Chin et al., 2007).

Whichever health policy approach is selected, it is well known that multi-factored interventions are most effective. Whatever option is selected, nurses should be involved because they are cost-effective providers, are able to spend time with patients, and know how to tailor interventions to match the specific needs of an individual who has a health disparity. Nurses are trained to work in teams, have been educated to be patient-centered, and have learned about cultural differences during their undergraduate education (Chin et al., 2007).

DISCUSSION QUESTIONS

1. Discuss one factor or one healthcare policy within the United States that contributes to a specific health disparity.
2. What should the role of government be in decreasing health disparities?
3. What should the role of community and church groups be in decreasing health disparities?
4. Why should groups who experience health disparities be involved in helping to minimize health disparities?
5. Talk about one positive way the quality of care provided in the clinical setting where you are working this semester minimizes a specific health disparity. Talk about one way in which the quality of care in that facility needs to be improved to further minimize a specific health disparity.
6. Discuss an example of a gender-related, an age-related, and a language-related health disparity.
7. Why should the United States develop health policies designed to minimize health disparities? What are the most important reasons for doing this?
8. How do patient navigator programs (in which recovered patients help newly diagnosed patients understand where to get help and how to deal with the healthcare system) help to minimize health disparities?
9. How could the burden of a disease be greater in one group than another? Give an example that explains your answer.
10. What factors might influence an individual to refuse or delay treatment?
11. How are language fluency and health disparities related?
12. What is the immigrant paradox and why is it important to consider?
13. Why do health disparities exist in systems like Medicare and the Veteran's Administration, where everyone in that system can theoretically access care?
14. Which national laws, policies, and standards influence how health disparities are defined or treated?
15. What are the differences between prevalence and incidence rates?
16. Talk about several of the healthcare disparities that are the most costly to treat.
17. Why is increasing first contact access to services important?
18. Should disease incidences and mortality rates be compared to a White population, the population with the best health in a given category, or the total U.S. population? Explain your answer.

CHECK YOUR UNDERSTANDING

Rank order the following health policy options (1 to 15) in terms of their cost. Offer a rationale for why the policy should or should not be adopted, and who should pay for the policy change.

The health policy options you are to rank are:

1. Expanding healthcare insurance coverage
2. Funding community-level interventions (community-based participatory research and education) specifically designed to reduce geographic differences in health
3. Empowering patients and family members to become more active partners in their health care
4. Facilitating coordination of care between care providers and systems of care by integrating health, social, and supportive services
5. Supporting pay-for-performance and public reporting of health outcomes
6. Funding more primary prevention activities
7. Conducting economic analyses to determine which interventions provide the highest level of benefit for the resources expended
8. Beginning by targeting the most preventable/curable diseases and diseases with the highest economic burden
9. Targeting groups with the highest need and most health disparity
10. Recruiting diverse providers and educating all providers to understand the culture and language of the communities that they serve
11. Using patient navigators, case managers, and promotoras
12. Focusing on demand and supply level impediments (such as limitations on cigarette company advertisements)
13. Reimbursing for evidence-based interventions known to be effective with given conditions
14. Providing reimbursement for care delivered via mobile health using information technology
15. Activating shared cultural norms and practices when motivating behavioral change (Chin et al., 2007; CRCHD, 2004).

Please complete the following table and you proceed with this assignment.

Rank Order	Health Policy Option	Rationale for Why the Health Policy Should or Should Not Be Adopted	Who Should Pay for Implementing the Policy? Provide a Rationale for Your Answer.
1. (Most Costly)			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15. (Least Costly)			

WHAT DO YOU THINK?

1. Which health disparities are most common in the clinical setting where you are placed this semester?
2. What are the largest barriers to health and health care you or someone in your family has faced? How did you or your family member navigate around those barriers?
3. What did being sick mean in your family? How did that meaning differ compared to another family you knew? Who cared for you when you were sick as a child?
4. How would you improve the measurement or monitoring of health disparities in the United States?

5. Should federal funding be allocated to reduce health disparities based on location (such as a rural area or inner city where there are fewer healthcare providers)?
6. Are disabled individuals at greater risk for health disparities? Explain your answer.
7. Does everyone have a right to equal quality health care? Why or why not?
8. Are there dangers associated with requiring physicians to use evidence-based data when prescribing medical treatments? Explain your answer.
9. Do you agree or disagree with the statement that the health of the healthiest group in a society shows what everyone should be able to achieve in terms of health? Explain your answer.
10. Should translators be available 24 hours a day in healthcare facilities or should English as the official language of the United States as a policy be followed? Explain your answer.
11. Have you or anyone in your family ever had trouble receiving a referral to a specialist? Describe what factors influenced that slow referral.
12. Have you neglected any yearly recommended health screenings since being in nursing school? What factors motivated you to neglect those screenings or to schedule them in a timely fashion?
13. Has it ever been hard for you to ask a patient what their ethnic or racial background was? How did you handle that?
14. Have you ever forgotten or had trouble understanding what a healthcare provider was recommending that you do to improve your health? Discuss that situation.
15. Should free school lunch programs be continued or discontinued? Explain your answer.
16. Should limits be placed on the amount of healthcare dollars expended on individuals over the age of 95? Explain why that would or would not be a good idea.

REFERENCES

Agency for Healthcare Research and Quality [AHRQ]. (2003). *National healthcare disparities report*. Rockville, MD: U.S. Department of Health and Human Services.

Braveman, P. A., Cubbin, C., Egeter, S., Williams, D. R., & Pamuk, E. (2010). Socioeconomic disparities in health in the United States: What the patterns tell us. *American Journal of Public Health*, *100*(S1), S186–S196.

Center to Reduce Cancer Health Disparities [CRCHD]. (2004). *Economic costs of cancer health disparities: Summary of meeting proceedings*. Bethesda, MD: U.S. Department of Health and Human Services.

Center to Reduce Cancer Health Disparities [CRCHD]. (Dec 6–7, 2004). *Summary of meeting proceedings: Economic costs of cancer health disparities.* Bethesda, MD: National Cancer Institute.

Center to Reduce Cancer Health Disparities [CRCHD]. (2011a). *Health disparities defined.* Retrieved from http://crchd.cancer.gov/disparities/defined.html

Center to Reduce Cancer Health Disparities [CRCHD]. (2011b). *Cancer health disparities.* Retrieved from http://www.cancer.gov/cancertopics/factsheet/cancer-health-disparities

Chin, M. H., Walters, A. E., Cook, S. C., & Huang, E. S. (2007). Interventions to reduce racial and ethnic disparities in healthcare. *Medical Care Research and Review*, *64*, 7S–28S.

Cooper, C., Tandy, A. R., Balamurali, T., & Livingston, G. (2010). A systematic review and meta-analysis of ethnic differences in use of dementia treatment, care, and research. *American Journal of Geriatric Psychiatry*, *18*(3), 193–203.

Dankwa-Mullan, I., Rhee, K. B., Staff, D. M., Pohlhaus, J. R., Sy, F., Stinson, N., & Riffin, J. (2010). Moving toward paradigm-shifting research in health disparities through translational, transformational, and transdisciplinary approaches. *American Journal of Public Health*, *100*(S1), S19–S24.

Egan, M., Tannahill, C., Petticrew, M., & Thomas, S. (2008). Psychosocial risk factors in home and community settings and their associations with population health and health inequalities: A systematic meta-review. *BMC Public Health*, *8*, 239. Doi:10.1186/1471-2458-8-239.

Egley, A., & O'Donnell, C. E. (2009). *OJJDP Fact Sheet: Highlights of the 2007 National Youth Gang Survey*, Washington, DC: USDOJ, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. Retrieved from http://www.ncjrs.gov/pdffiles1/ojjdp/225185.pdf

Epstein, M., Moreno, R., & Bacchetti, P. (1997). The underreporting of deaths of American Indian children in California, 1979 through 1993. *American Journal of Public Health*, *87*(8), 1363–1366.

Federico, S. G., Abrams, L., Everhart, R. M., Melinkovich, P., & Hambidge, S. J. (2010). Addressing adolescent immunization disparities: A retrospective analysis of school-based health center immunization delivery. *American Journal of Public Health*, *100*(9), 1630–1634.

Fiscella, K., & Williams, D. R. (2004). Health disparities based on socioeconomic inequities: Implications for urban healthcare *Academic Medicine*, *79*(12), 1139–1147.

Gallo, L. C., de los Monteros, K. E., Allison, M., Roux, A. D., Polak, J. F., Watson, K. E., & Morales, L. S. (2009). Do socioeconomic gradients in subclinical atherosclerosis vary according to acculturation level? Analyses of Mexican-Americans in the multi-ethnic study of atherosclerosis. *Psychosomatic Medicine*, *71*(7), 756–762.

Gibbons, M.C. (2011). Use of health information technology among racial and ethnic underserved communities. *Perspectives in Health Information Management*, 1–13.

Goyal, D., Murphy, S. O. & Cohen, J. (2006). Immigrant Asian Indian women and postpartum depression. *Journal of Obstetrical and Gynecological Neonatal Nursing*, *35*(1), 98–104.

Hahn, R. A., Eaker, E., Barker, N. D., Teutsch, S. M., Sosniak, W., & Krieger, N. (1995). Poverty and death in the United States. *Epidemiology*, *6*(5), 490–497.

Hall, E. T. & Hall, M. R. (1990). *Understanding cultural differences.* Yarmouth, ME: Intercultural Press.

Han, H., Lee, J., Kim, J., Hedlin, H., Song, H., & Kim, M. (2009). A meta-analysis of interventions to promote mammography among ethnic minority women. *Nursing Research*, *58*(4), 246–254. Doi: 10.1097/NNR .Obo13c3181acOf7f.

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, *40*(3), 208–230.

La Veist, T. A., Gaskin, D. J., & Richard, P. (2009). *The economic burden of health inequalities in the United States*. Washington, DC: Joint Center for Political and Economic Studies.

Leninger, M., & McFarland, M. (2002). *Transcultural nursing: Concepts, theory, research, and practice*. (3rd ed.), New York, NY: McGraw-Hill Professional.

Lewis, N. M. (2009). Mental health in sexual minorities: Recent indicators, trends, and their relationships to place in North America and Europe. *Health and Place*, *15*, 1029–1045.

Mathias, R. A., Grant, A. V., Rafaels, N., Hand, T., Gao, L., Vergara, C., . . . Barnes, K. C. (2009). A genome-wide association study on African ancestry populations for asthma. *Journal of Allergy and Clinical Immunology*, *125*(2), 336–347.

National Institute of Child Health and Human Development (2003). *Health disparities: Bridging the gap*. Bethesda, MD: U.S. Department of Health and Human Services.

National Institute on Drug Abuse [NIDA]. (2011). *Health disparities news: Recent findings*. Retrieved from http://www.drugabuse.gov/about/organization/healthdisparities/news/index.html.

Nicholson, R. A., Kreuter, M. W., & Lapka, C., Wellborn, R., Clark, E. M., Sanderes-Thompson, V., . . . Casey, C. (2008). Unintended effects of emphasizing disparities in cancer communication to African-Americans. *Cancer Epidemiology, Biomarkers & Prevention*, *17*, 2946–2953.

Pamuk, E. R., Makuk, D. M., Heck, K. E., Reuben, C., & Lochner, K. (1998). *Health, United States, 1998, with socioeconomic status and health chartbook.* Hyattsville, MD: National Center for Health Statistics.

Paskett, E. D., Reeves, K. W., McLaughlin, J. M., Katz, M. L., McAlearney, A. S., Ruffin, M. T., . . . Gehlert, S. (2008). Recruitment of minority and underserved populations in the United States: The Centers for Population Health and Health Disparities experience. *Contemporary Clinical Trials*, *29*(6), 847–861.

Roblin, D. W., Houston, T. K., Allison, J. J., Joski, P. J., & Becker, E. R. (2009). Disparities in use of a personal health record in a managed care organization. *Journal of the American Medical Informatics Association, 16*(5), 683–689. DOI: 10.1197/jamia.M3169 PMCID: PMC2744719.

Shavers, V. L. & Brown, M. L. (2002). Racial and ethnic disparities in the receipt of cancer treatment. *Journal of the National Cancer Institute*, *94*(5), 334–357.

Schnittker, J. & McLeod, J. D. (2005). The social psychology of health disparities. *Annual Review of Sociology*, *31*, 75–103.

Starfield, B. (1992). *Primary care: Concept, evaluation, and policy*. New York, NY: Oxford University Press.

Surveillance Epidemiology and End Results [SEER]. (2010). Health disparities calculator. Retrieved from http://seer.cancer.gov/hdcalc

Tirado, M. (2011). Role of mobile health in the care of culturally and linguistically diverse U.S. populations. *Perspective in Health Information Management*, 1–7.

U.S. Department of Health and Human Services (2001). *National standards for culturally and linguistically appropriate services in healthcare: Executive Summary*. Washington, DC: Office of Minority Health.

U.S. Department of Health and Human Services. (2002). *Health, United States, 2002: With chart book on trends in the health of Americans*. Hyattsville, MD: National Center for Health Statistics. Table 28, Life expectancy at birth, at 65 years of age, and at 75 years of age, according to race and sex: United States, selected years 1900–99, p. 116.

Yu, T., Chou, C., Johnson, P. J., & Ward, A. (2010). Persistent disparities in Pap test use: Assessments and predictions for Asian women in the US, 1982-2010. *Journal of Immigrant Minority Health*, *12*, 445-453.

Williams, D. R., & Mohammed, S. A. (2008). Poverty, migration, and health. In A. Lin and D. Harris (Eds.), *The colors of poverty* (pp. 135–169). New York, NY: Russell Sage Foundation.

Williams, D. R., & Rucker, T. D. (2000). Understanding and addressing racial disparities in healthcare *Healthcare Financing Review*, *21*(4), 75–90

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