ous being the anatomical differences in their reproductive systems.

**sex roles** The behaviors and patterns of activities men and women may engage in that are directly related to their biological differences and the process of reproduction.

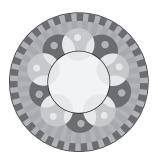
sexual identity The degree of awareness and recognition by an individual of his or her sex and sex roles.



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## **Culture and Health**

One major role of education is to improve the lives of the people we touch. Whether through research, service, or provision of primary or secondary health care, we look forward to the day when we can adequately diagnose and treat medical diseases, prevent abnormal behavior, and foster positive states of being in balance with others and the environment. This is not an easy task; a multitude of forces influences our health and our ability to prevent and treat illness.

As we strive to meet this challenge, the important role of culture in contributing to the etiology, maintenance, and treatment of disease has become increasingly clear. Although our goals of prevention and treatment of disease and maintenance of health may be the same across cultures, cultures vary in their definitions of what is considered "healthy" or "mature" (Tseng & McDermott, 1981). Cultural differences also exist in perceptions of problems and in preferred strategies for coping with them (Terrell, 1992). Our job is made more difficult because cultural beliefs and practices influence treatment, and they shape both the therapist's and the client's definitions and understandings of the problem (Berry et al., 1992). Traditional approaches to treatment of abnormal behavior may prove insensitive or inappropriate when applied across cultures.

This chapter explores how cultural factors influence physical health and disease processes, and our attempts to treat them. We begin with an examination of cultural differences in the definition of health, and then explore cultural differences in conceptions of the body. We then review the considerable amount of research concerning the relationship between culture and heart disease, other physical disease processes, eating disorders, and suicide. We will also explore the way cultural differences influence help-seeking, treatment compliance, and

issues of responsibility, trust, and self-control over personal health and disease processes. We will summarize the research in the form of a model, then use this information to consider ways of developing culturally relevant, sensitive, and effective treatment programs.

### **Cultural Differences in the Definition of Health**

Before we look at how culture influences health and disease processes, we need to examine exactly what we mean by health. More than 50 years ago, the World Health Organization (WHO) developed a definition at the International Health Conference, with 61 countries represented. They defined health as "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity" (World Health Organization, 1948).

In the United States, our views of health have been heavily influenced by what many call the **biomedical model** of health and disease. This model views disease as resulting from a specific, identifiable cause originating inside the body. These causes, whether viral, bacterial, or other, are referred to as **pathogens** and are seen as the root of all physical and medical diseases. Cardiovascular disease, for example, has been linked to specific pathogens such as clotting from lipids and cholesterol. The biomedical model of disease has also influenced psychology's view of abnormal behavior and psychopathology. Traditional psychological approaches view the origin of abnormal behaviors as residing within the person. Such abnormalities may result from lack of gratification or overgratification of basic, instinctual processes (as suggested by Freudian psychoanalytic theory) or from learned responses (as suggested by classical or operant conditioning).

The traditional biomedical model of health in both medicine and psychology has had a profound influence on treatment approaches. If specific medical or psychobehavioral pathogens exist within a person's body, those pathogens must be dealt with when treating disease. Medical treatment and traditional psychological approaches focus on making an intervention within a person. In the traditional biomedical model, health is characterized as the lack of disease. If a person remains free of disease, the person is considered healthy.

Views of health from other cultures suggest different definitions of health. People of China and ancient Greece, for example, viewed health not only as the absence of negative states but also as the presence of positive ones. Balance between self and nature and across the individual's various roles in life is viewed as an integral part of health in many Asian cultures. This balance can produce a positive state—a synergy of the forces of self, nature, and others—that many call health. Alternative views of health that incorporate the presence of positive as well as the absence of negative states are important in many cultures today.

In China, the concept of health, based on Chinese religion and philosophy, focuses on the principles of *yin* and *yang*, which represent negative and positive energies, respectively. The Chinese believe that our bodies are made up of elements of *yin* and *yang*. Balance between these two forces results in good

health; an imbalance—too much *yin* or too much *yang*—leads to poor health. Many things can disturb this balance, such as eating too many foods from one of the elements, a change in social relationships, the weather, the seasons, or even supernatural forces. Maintaining a balance involves not only the mind and body, but also the spirit and the natural environment. From the Chinese perspective, the concept of health is not confined to the individual but encompasses the surrounding relationships and environment (Yanchi, 1988).

Incorporating balance as a positive aspect of health is not foreign in the United States today. In the past decade or two, we have seen a rising frustration with defining health solely as the absence of disease. Americans have become much more aware of how lifestyle factors can contribute not only to the absence of negative states but also to the presence of positive ones. In particular, the concept of **hardiness** has been used in recent years in contemporary psychology to denote not only a lack of disease but the presence of positive health states. Biobehavioral medicine and health psychology, nonexistent even a few years ago, represent responses by the health care and academic professions to a growing interest in definitions of health different from those afforded by the traditional biomedical model. We now know that many of the leading causes of death are directly and indirectly attributable to lifestyle choices and unhealthy behaviors (Feist & Brannon, 1988), many of which will be explored in the remainder of this chapter. These findings contribute to our growing knowledge of the impact of behavior on health. And because behavior is heavily influenced by culture, an increased awareness of the links among health, lifestyle, and behavior can help us understand the sociocultural influences on health and disease.

Concepts of health may differ not only between cultures but also within a pluralistic culture such as the United States or Canada. Mulatu and Berry (2001) point out that health perspectives may differ between individuals from the dominant or mainstream culture and those of the nondominant social and ethnocultural group. They cite the example of Native Americans, who, based on their religion, have a holistic view of health and who consider good health to be living in harmony with oneself and one's environment. When one does not live in harmony and engages in negative behaviors such as "displeasing the holy people of the past or the present, disturbing animal and plant life, misuse of sacred religious ceremonies, strong and uncontrolled emotions, and breaking social rules and taboos" (p. 219), the result is ill health. This is in sharp contrast to the biomedical model, in which illnesses are thought to originate from viruses and bacteria.

Huff (1999) argues that the concepts of health held by various ethnic and immigrant groups within the United States may differ from and even contradict the health concepts of the mainstream society. This may create problems in the identification and treatment of illnesses, as discussed later in the chapter. However, mainstream culture is also adapting and incorporating ideas of health that immigrants have brought with them, as seen in the rising popularity and interest in alternative health practices such as acupuncture, homeopathy, herbal medicines, and spiritual healing (Eisenberg et al., 1998). Thus, our own views on health are changing as our culture becomes increasingly pluralistic.

## **Culture and Conceptions of the Body**

Cultures differ in how they view the human body. These different conceptions of the human body influence how people of different cultures approach health and disease, treatment, and perhaps even the types of diseases that affect them.

MacLachlan (1997) has suggested that cultures have different metaphors for how they conceptualize the human body. The most widely held view, according to MacLachlan, involves the notion of balance and imbalance in the body: The various systems of the body produce harmony or health when in balance, illness and disease when in imbalance. A theory first developed by Hippocrates, which heavily influences views of the human body and disease in most industrialized countries and cultures today, suggests that the body is comprised of four humors: blood, phlegm, yellow bile, and black bile. Too much or too little of any of these throws the body out of balance, resulting in disease. Derivatives of these terms—such as sanguine, phlegmatic, and choleric—are widely used in health and medical circles today.

MacLachlan (1997) points out that common theories of disease in many Latin American cultures involve a balance between hot and cold. These terms do not refer to temperature, but to the intrinsic power of different substances in the body. Some illnesses or states are hot, others cold. A person who is in a hot condition is given cold foods to counteract the situation, and vice versa. The Chinese concept of *yin* and *yang* shows similarities to this concept.

Social and cultural factors play a major role in the perception of one's own and others' body shapes, and these perceptions influence the relationship between culture and health. For example, a number of studies have found an inverse relationship between social class and body weight in many American and European cultures; that is, individuals of higher social class generally have lower body weights than individuals of lower social class (reviewed in Furnham & Alibhai, 1983). The inverse, however, is true in many other cultures. And it has also been shown that the longer some immigrants have lived in traditionally Western cultures, the less obese they tend to be. Furnham and Alibhai (1983) examined how Kenyan Asian, British, and Kenyan British females perceived female body shapes. In their study, participants were shown drawings of women ranging from extremely anorexic to extremely obese, and were asked to rate each on a series of bipolar adjectives. The results indicated that the Kenyan Asians rated larger figures more favorably and smaller figures less favorably than did the British, as predicted. The Kenyan British were similar to the British group in their perceptions.

A later study by Furnham and Baguma (1994) also confirmed the role of culture in the perception of body shape. In this study, British and Ugandan students rated 24 drawings of male and female figures on 12 bipolar scales. Again, the figures ranged from extremely anorexic to extremely obese. The results showed cultural differences on the extreme pictures, with Ugandans rating the obese female and anorexic male figures as more attractive than British observers. Again, these findings point to the important role of culture and cultural stereotypes in the perception and evaluation of body shapes, which in turn has

implications for health and disease processes. Other studies (for example, Henriques, Calhoun, & Cann, 1996) have documented similar differences among ethnic groups in the United States. Future research will need to establish the links between these types of perceptions and actual health-related behaviors, in order to document the degree to which these perceptions influence health and disease processes.

# Sociocultural Influences on Physical Health and Medical Disease Processes

#### Psychosocial Determinants of Health and Disease

In the past few years, psychology as a whole has becoming increasingly aware of the important role that culture may play in the maintenance of health and the production of disease processes. This awareness can be seen on many levels, from more journal articles published on these topics to the establishment of new journals devoted to this area of research. This increased awareness is related to a growing concern with psychosocial determinants of health and illness in general.

Scholars have long been interested in the close relationship between mental and physical health. Research linking Type A personality patterns and cardiovascular disease is a good example of this area of study. As most people are aware, research originally conducted three decades ago showed that individuals who were pressed for time, always in a rush, agitated and irritable, and always on the go—characterized as Type A personality syndrome—appeared to be at greater risk for developing cardiovascular disease and heart attacks than non–Type A personalities. This linkage was important not only in informing us about the etiology and possible prevention of cardiovascular disease; it also opened the door to examining the close relationship between psychology and physiology—the field we now know as health psychology.

Over the past three decades, a number of important and interesting studies have continued to document the linkage between psychosocial factors and health/disease states. Steptoe and his colleagues (Steptoe, Sutcliffe, Allen, & Coombes, 1991; Steptoe & Wardle, 1994) have reviewed many of the previous studies, highlighting the links between unemployment and mortality, cardiovascular disease, and cancer; between goal frustration and negative life events and gastrointestinal disorders; between stress and myocardial ischemias and the common cold; between bereavement and lymphocyte functions; between pessimistic explanatory styles and physical illnesses; and between hardiness and physical illnesses, among others. Indeed, the field has come a long way beyond Type A personality patterns and cardiovascular disease in demonstrating the close relationship between psychosocial factors and health/disease outcomes.

Adler and her colleagues (1994) have reported that socioeconomic status (SES) is consistently associated with health outcomes, with people of higher SES enjoying better health than do people of lower SES. This relationship has

been found not only for mortality rates, but for almost every disease and condition studied. Research, however, has not been able to identify the exact mechanisms that mediate the linkage between SES and health. Adler and colleagues suggest that health-related behaviors such as smoking, physical activity, and alcohol use may mediate that relationship, as these variables appear to be related to SES. In addition, psychological characteristics such as depression, hostility, stress, and social ordering—one's relative position in the SES hierarchy—may also mediate the relationship between SES and health, because each of these variables appears to be related to SES. Recent studies have proposed that other psychosocial factors such as perceived racism and discrimination contribute to negative health outcomes such as hypertension and cardiovascular disease (Brondolo, Rieppi, Kelly, & Gerin, 2003; Krieger, 1999).

Thus, research of the past two decades has demonstrated convincingly that psychosocial factors play an important role in maintaining and promoting health, and in the etiology and treatment of disease. Still, many avenues remain open for future research, including establishing direct links between particular psychosocial factors and specific disease outcomes, and identifying the specific mechanisms that mediate those relationships. Hopefully, research of the next two decades will be as fruitful as that of the past two decades in providing much-needed knowledge about these processes.

Beyond looking at psychosocial factors, many scholars and health care practitioners alike have long been interested in the contribution of sociocultural factors to health. In the past decade, a number of important studies have shown how culture may play a major role in the development and treatment of illness. These studies, to be reviewed in this chapter, destroy the common notion that physical illness has nothing to do with sociocultural or psychological factors, and vice versa. Indeed, they contribute to our combined knowledge of psychological factors in physical disease processes. Changes in lifestyle (for example, diet, smoking, exercise, and alcohol consumption) can be seen as our response to this increasing recognition of the complex interrelationship among culture, psychology, and medical processes.

### Social Isolation and Mortality

Some of the earliest research on sociocultural factors in health and disease processes examined the relationship between social isolation or social support and death. Earlier research had highlighted the potential negative effects of social isolation and social disadvantage on health and disease (Feist & Brannon, 1988). One of the best-known studies in this area is the Alameda County study (Berkman & Syme, 1979), named after the county in California where the data were collected and the study conducted. Researchers interviewed almost 7,000 individuals to discover their degree of social contact; the final data set included approximately 4,725 people, as some people were dropped from the study. Following the initial assessment interview, deaths were monitored over a nineyear period. The results were clear for both men and women: Individuals with the fewest social ties suffered the highest mortality rate, and people with the

most social ties had the lowest rate. These findings were valid even when other factors were statistically or methodologically controlled, including the level of physical health reported at the time of the initial questionnaire, the year of death, socioeconomic status, and a number of health-related behaviors (such as smoking and alcohol consumption). This study was one of the first to demonstrate clearly the enormous role that sociocultural factors may play in the maintenance of physical health and illness, and raised the awareness of scientists and theorists alike concerning the possible role of social factors in health/disease processes.

#### Individualism and Cardiovascular Disease

For many years now, researchers have examined how social and psychological factors influence the development and treatment of cardiovascular disease. Several factors have contributed to this focus on cardiovascular disease. One is the previous work identifying a number of psychological and behavioral factors that appear to influence cardiovascular disease—notably, the Type A personality profile (see Friedman & Rosenman, 1974). This profile, found across various cultures (del Pino Perez, Meizoso, & Gonzalez, 1999), is characterized by competitiveness, time urgency, anger, and hostility. Another is the relatively high incidence of cardiovascular disease in the United States, making it a major health concern for many Americans.

Although there has not been a lot of research on the role of social and cultural (as opposed to personality) factors, some studies indicate that they also contribute to cardiovascular disease. Marmot and Syme (1976), for example, studied Japanese Americans, classifying 3,809 subjects into groups according to how "traditionally Japanese" they were (spoke Japanese at home, retained traditional Japanese values and behaviors, and the like). They found that those who were the "most" Japanese had the lowest incidence of coronary heart disease—comparable to the incidence in Japan. The group that was the "least" Japanese had a three to five times higher incidence. Moreover, the differences between the groups could not be accounted for by other coronary risk factors. These findings point to the contribution of social and cultural lifestyles to the development of heart disease.

Triandis and his colleagues (1988) took this finding one step further, using the individualism–collectivism (IC) cultural dimension and examining its relationship to heart disease across eight different cultural groups. European Americans, the most individualistic of the eight groups, had the highest rate of heart attacks; Trappist monks, who were the least individualistic, had the lowest rate. Of course, this study is not conclusive, as many other variables confound comparisons between Americans and Trappist monks (such as industrialization, class, and lifestyle). Nevertheless, these findings again highlight the potential contribution of sociocultural factors to the development of heart disease.

Triandis and his colleagues (1988) suggested that social support or isolation was the most important factor that explained this relationship, a position congruent with the earlier research on social isolation. That is, people who live in

more collectivistic cultures have stronger and deeper social ties with others than do people in individualistic cultures. These social relationships, in turn, are considered a "buffer" against the stress and strain of living, reducing the risk of cardiovascular disease. People who live in individualistic cultures do not have the same types or degrees of social relationships; therefore, they have less of a buffer against stress and are more susceptible to heart disease.

#### Other Dimensions of Culture and Other Diseases

The study by Triandis and his colleagues (1988) was especially important because it was the first to examine the relationship between cultural differences and the incidence of a particular disease state (heart disease). Research has also been done on other disease states and health-related behaviors, such as cancer, smoking, stress, and pain (see Feist & Brannon, 1988). Collectively, these studies suggest the important role of sociocultural factors—most notably, social support—in contributing to health and disease.

Still, these studies are limited in that they have focused on only one aspect of culture—individualism versus collectivism—with its mediating variable of social support. As discussed in Chapter 2 and elsewhere, however, culture encompasses many other important dimensions, including power distance, uncertainty avoidance, masculinity, tightness, and contextualization. Another limitation of the previous research is that it has looked almost exclusively at mortality rates or cardiovascular disease. Other dimensions of culture, however, may be associated with the incidence of other disease processes. If members of individualistic cultures are indeed at higher risk for heart disease, for example, perhaps they are at lower risk for other disease processes. Conversely, if collectivistic cultures are at lower risk for heart disease, they may be at higher risk for other diseases.

Matsumoto and Fletcher (1996) investigated this possibility by examining the relationship among multiple dimensions of culture and multiple disease processes, opening the door to this line of study. These researchers obtained the mortality rates for six different medical diseases: infections and parasitic diseases, malignant neoplasms (tumors), diseases of the circulatory system, heart diseases, cerebrovascular diseases, and respiratory system diseases. These epidemiological data, taken from the World Health Statistics Quarterly (World Health Organization, 1991), were compiled across 28 countries widely distributed around the globe, spanning five continents, and representing many different ethnic, cultural, and socioeconomic backgrounds. In addition, incidence rates for each of the diseases were available at five age points for each country: at birth and at ages 1, 15, 45, and 65. To get cultural data for each country, Matsumoto and Fletcher (1996) used cultural index scores previously obtained by Hofstede (1980, 1983), who analyzed questionnaire data about cultural values and practices from large samples in each of these countries and classified their responses according to four cultural tendencies: individualism versus collectivism (IC), power distance (PD), uncertainty avoidance (UA), and masculinity (MA).

**Table 8.1** Summary of Findings on the Relationship between Four Cultural Dimensions and Incidence of Diseases

Cultural Dimension	Rates of Disease		
Higher Power Distance	<ul> <li>Higher rates of infections and parasitic diseases</li> <li>Lower rates of malignant neoplasm, circulatory disease, and heart disease</li> </ul>		
Higher Individualism	<ul> <li>Higher rates of malignant neoplasms and heart disease</li> <li>Lower rates of infections and parasitic diseases, cerebrovascular disease</li> </ul>		
Higher Uncertainty Avoidance	<ul><li>Higher rates of heart disease</li><li>Lower rates of cerebrovascular disease and respiratory disease</li></ul>		
Higher Masculinity	■ Higher cerebrovascular disease		

Source: Matsumoto & Fletcher, 1996

Matsumoto and Fletcher then correlated these cultural index scores with the epidemiological data. The results were quite fascinating and pointed to the importance of culture in the development of these disease processes. See Table 8.1 for a summary of findings.

The countries in this study differ economically as well as culturally, and it may well be that these economic differences—particularly with regard to the availability of treatment, diet, and sanitation—also contribute to disease. To deal with this possibility, Matsumoto and Fletcher (1996) recomputed their correlations controlling for per capita gross domestic product (GDP) of each country. Even when the effects of per capita GDP were accounted for, the predictions for infections and parasitic diseases, circulatory diseases, and heart diseases all survived. The predictions for UA and cerebrovascular and respiratory diseases, and MA and cerebrovascular diseases, also survived. Thus, these cultural dimensions predicted disease above and beyond what is accounted for by economic differences among the countries. Only the prediction for malignant neoplasms was not supported, indicating that economic differences among the countries cannot be disentangled from cultural differences in predicting the incidence of neoplasms.

A study by Bond (1991) also looked at the influence of dimensions other than IC on health and disease processes other than heart disease. Bond surveyed the relationship between cultural values and the incidence of disease processes in 23 countries. The cultural values he measured were social integration, cultural inwardness, reputation, and morality. Social integration refers to the degree to which a culture fosters the coming together of people in an environment that nurtures social relationships. This dimension was statistically correlated

with an increased incidence of cerebrovascular disease, ulcers of the stomach and duodenum, and neoplasms of the stomach, colon, rectum, rectosigmoid junction, and anus. Reputation was significantly correlated with acute myocardial infarction, other ischemic heart disease, neoplasms of the colon, rectum, rectosigmoid junction, and anus, and neoplasms of the trachea, bronchi, and lungs. Morality was significantly associated with cirrhosis of the liver.

How and why does culture affect medical disease processes? Triandis and colleagues (1988) suggested that culture—specifically, social support—plays an important role in mediating stress, which affects health. The findings of Matsumoto and Fletcher (1996) and Bond (1991), however, suggest a much more complex picture. Although collectivistic cultures were associated with lower rates of cardiovascular diseases, replicating the previous findings, they were also associated with death from infectious and parasitic diseases, and cerebrovascular diseases. Thus, although social support may be a buffer against life stress in the prevention of heart attacks, these data suggest that there is something else to collectivism that actually increases susceptibility to other disease processes. To be sure, these other factors may not be cultural per se. Collectivism, for example, is generally correlated with geographic location; countries nearer the equator tend to be more collectivistic. Countries nearer the equator also have hotter climates, which foster the spread of organisms responsible for infectious and parasitic diseases. The relationship between collectivism and death from these types of disease processes, therefore, may be related to geography rather than culture.

Still, these findings do suggest that individualism is not necessarily bad, and collectivism is not necessarily good, as earlier findings had suggested. The latest findings suggest, instead, that different societies and countries develop different cultural ways of dealing with the problem of living. Each way is associated with its own specific and different set of stressors, each of which may take its toll on the human body. Because different cultural ways of living take different tolls on the body, they are associated with different risk factors and rates for different disease processes. This view may be a more holistic account of how culture may influence health and disease processes.

Future research will need to investigate further the specific mechanisms that mediate these relationships. Some studies, for example, will need to examine more closely the relationship among culture, geography, and other noncultural factors in connection with disease incidence rates. Other studies will need to examine directly the relationship between culture and specific behavioral and psychological processes, to elucidate the possible mechanisms of health and disease. Matsumoto and Fletcher (1996), for example, suggested that culture influences human emotion and human physiology, particularly with respect to autonomic nervous system activity and the immune system. For example, the link between PD and circulatory and heart diseases may be explained by noting that cultures low on PD tend to minimize status differences among their members. As status and power differences diminish, people are freer to feel and express negative emotions, such as anger or hostility, to ingroup others. Containing negative emotions, as must be done in high-PD cul-

tures, may have dramatic consequences for the cardiovascular system, resulting in a relatively higher incidence of circulatory and heart diseases in those cultures. A study by Ekman, Levenson, and Friesen (1983), documenting substantial increases in heart rate associated with angry expressions, lends further credence to this hypothesis. Hopefully, future research will be able to address these and other possibilities.

### Cultural Discrepancies and Physical Health

Although the studies described so far suggest that culture influences physical health, more recent research suggests that culture per se is not the only culturally relevant variable. Indeed, the discrepancy between one's personal cultural values and those of society may play a large role in producing stress, which in turn leads to negative health outcomes. Matsumoto and colleagues (1999) tested this idea by asking university undergraduates to report what their personal cultural values were, as well as their perceptions of society's values and ideal values. Participants in this study also completed a scale assessing strategies for coping with stress; anxiety, depression, and other mood measures; and scales assessing physical health and psychological well-being. Discrepancy scores in cultural values were computed by taking the differences between self and society, and self and ideal, ratings. These discrepancy scores were then correlated with the scores on the eight coping strategies assessed. The results indicated that discrepancies between self and society's cultural values were significantly correlated with all eight coping strategies, indicating that greater cultural discrepancies were associated with greater needs for coping. These coping strategies were significantly correlated with depression and anxiety, which in turn were significantly correlated with scores on the physical health symptoms checklist scales. In particular, higher scores on anxiety were strongly correlated with greater health problems. The results of this study, therefore, suggest that greater discrepancy between self and societal cultural values may lead to greater psychological stress, which necessitates greater degrees of coping, which affects emotion and mood, which causes greater degrees of anxiety and depression, which then lead to more physical health problems.

Of course, this single study is not conclusive; future research will need to replicate these findings, and elaborate on them. They do suggest, however, the potential role of cultural discrepancies in mediating health outcomes, and open the door for new and exciting research in this area of psychology.

### **Culture and Eating Disorders**

One health-related topic that has received considerable attention concerns eating disorders and obesity. As mentioned previously, a number of studies have reported a negative correlation between body weight and income in the United States: As people get wealthier, they tend to become thinner. In many other countries, the relationship is exactly the opposite: As people get wealthier, they tend to become larger; size is associated with wealth and abundance. A number

of studies, in fact, have found considerable cultural differences in perceptions of and stereotypes about thinness and obesity. Cogan, Bhalla, Sefa-Dedeh, and Rothblum (1996), for example, asked university students in Ghana and the United States to complete questionnaires about their weight, frequency of dieting, social activities, perceptions of ideal bodies, disordered eating, and stereotypes of thin and heavy people. They found that the Ghanaians were more likely to rate larger body sizes as ideals in their society. Americans, especially females, were more likely to have dieted. American females also scored higher on dietary restraint, disordered eating behavior, and experiencing weight as a social interference.

Crandall and Martinez (1996) reported similar findings. These researchers compared attitudes about weight and fatness in American and Mexican students, by asking students to complete an anti-fat attitude scale and a scale on political ideologies and beliefs. The results indicated that Mexican students were less concerned about their own weight, and more accepting of fat people, than were the American students. Additionally, anti-fat attitudes in the United States appeared to be part of a social ideology that holds individuals responsible for their life outcomes. Attributions of controllability and responsibility were less important in predicting anti-fat attitudes in Mexico, where antipathy toward fat people did not appear related to any ideological framework.

Not only are such cultural differences in attitudes apparent across cultures outside the United States; a number of studies have recently documented similar findings across different cultural groups within the United States as well. Akan and Grilo (1995), for example, reported similar findings in comparing African, Asian, and European Americans. Harris and Koehler (1992) reported similar findings in comparing Anglo and Hispanic Americans in the southwestern United States. Abrams, Allen, and Gray (1993) reported similar findings comparing black and white female college students. And Hamilton, Brooks-Gunn, and Warren (1985) reported similar findings comparing black and white female professional ballet dancers.

Cultural differences in attitudes about fatness and thinness appear to be related to cultural differences in attitudes toward eating behaviors. In Akan and Grilo's (1995) study, for instance, European Americans reported greater levels of disordered eating and dieting behaviors, and greater body dissatisfaction, than did Asian and African Americans. Low self-esteem and high public selfconsciousness were associated with greater levels of problematic eating behaviors, attitudes, and body dissatisfaction. In Abrams, Allen, and Gray's (1993) study, white females demonstrated significantly greater disordered eating attitudes and behaviors than black females. Disordered eating behaviors, in turn, were related to depression, anxiety, and low self-esteem. In Hamilton, Brooks-Gunn, and Warren's (1985) study, none of the black dancers reported anorexia or bulimia, compared with 15% and 19%, respectively, of the white dancers. Self-reported anorectics had higher disordered eating attitudes, exhibited more psychopathology, and had poorer body images than nonanorectics. The bulimics valued their career less, dieted more, and exercised less frequently than nonbulimics. Finally, a recent study of Pakistani females found that exposure to Western culture significantly predicted more disturbed eating attitudes (Suhail & Nisa, 2002).

Collectively, these studies demonstrate convincingly that attitudes toward body size and shape, and eating, are heavily influenced by culture. Cultural values, attitudes, beliefs, and opinions about wealth, abundance, beauty and attractiveness, power, and other such psychological characteristics likely play a major role in determining attitudes toward eating, thinness, and obesity. These latter attitudes, in turn, most likely directly affect health-related behaviors such as eating, diet, and exercise. The research also suggests that these tendencies may be especially prevalent in the United States, especially among European American females. Crandall and Martinez's (1996) study suggests that this tendency in the United States may be related to specific ideologies about people, power, and responsibility. However, such tendencies are not solely an American phenomenon. Cross-cultural research has pointed to similarities between Americans and members of other cultures in their attitudes toward eating and preoccupation with thinness—for example, the Japanese (Mukai & McCloskey, 1996).

Future research will need to tackle the difficult question of exactly what it is about culture that influences attitudes about eating and stereotypes about thinness and obesity, and where cultures draw the line between healthy patterns and disordered eating behaviors that have direct, negative impacts on health. Future research will also need to tie specific eating behaviors to specific health and disease outcomes, and attempt to link culture with these relationships.

#### Culture and Suicide

No other behavior has health consequences as final as suicide—the taking of one's own biological life. Psychologists, sociologists, and anthropologists have long been fascinated by suicide, and have studied this behavior across many cultures. The research to date suggests many interesting cross-cultural differences in the nature of suicidal behavior, all of which point to the different ways in which people of different cultures view not only death, but life itself.

One of the most glorified and curious cultures with regard to suicidal behavior is that of Japan. Tales of Japanese pilots who deliberately crashed their planes into enemy targets during World War II stunned and mystified many people of other cultures. These individuals clearly placed the welfare, spirit, and honor of their country above the value of their own lives. To be sure, such acts of self-sacrifice were not limited to the Japanese, as men and women on both sides of war reach into themselves in ways many of us cannot understand to sacrifice their lives for the sake of others. But the Japanese case seems to highlight the mysterious and glorified nature of some acts of suicide in that culture.

Among the most glorified acts of suicide in Japan (called *seppuku* or *hara-kiri*—the slitting of one's belly) were those of the masterless samurai swordsmen who served as the basis for the story known as *Chuushingura*. In this factual story, a lord of one clan of samurai was humiliated and lost face because

of the acts of another lord. In disgrace, the humiliated lord committed *seppuku* to save the honor of himself, his family, and his clan. His now masterless samurai—known as *ronin*—plotted to avenge their master's death by killing the lord who had humiliated him in the first place. Forty-seven of them plotted their revenge and carried out their plans by killing the lord. Afterward, they turned themselves in to authorities, admitting to the plot of revenge and explaining the reasons for their actions. It was then decided that the only way to resolve the entire situation was to order the 47 *ronin* to commit *seppuku* themselves—which they did. In doing so, they laid down their lives, voluntarily and through this ritualistic method, to preserve the honor and dignity of their clan and families. Although these events occurred in the late 19th century, similar acts continue in Japan today. Some Japanese businessmen have committed suicide as a way of taking responsibility for the downturns in their companies resulting from the economic crisis in Japan and much of Asia.

Japan is by no means the only culture in which suicide has been examined psychologically and cross-culturally. Kazarian and Persad (2001) note that "suicide has been in evidence in every time period in recorded history and in almost every culture around the world. It is depicted, and reasons for its committal described, in tribal folklore, Greek tragedies, religious, philosophical, and historical writings, literature, modern soap operas, and rock music" (p. 275).

Many studies seem to point to profound cultural changes as a determinant of suicidal behavior. Leenaars, Anawak, and Taparti (1998), for example, suggest this factor as an important influence on suicide rates among Canadian Inuits, primarily among younger individuals. Sociocultural change has long been identified as a predictor of suicide among Native Americans, whose suicide rates are higher than those of other Americans (for example, EchoHawk, 1997; Bechtold, 1988; May & Dizmang, 1974; Resnik & Dizmang, 1971). Stresses associated with social and cultural changes have also been implicated in the suicide rates of many other cultural groups, including Native Hawaiians (Takeuchi et al., 1987), Greeks (Beratis, 1986), English (Robertson & Cochrane, 1976), Eskimos (Parkin, 1974), and many other groups.

Some researchers have attempted to identify other factors common to different cultures that may predict suicidal behavior. Literacy does not appear to affect suicide rates; one study comparing 54 cultural groups found no differences between literate and nonliterate cultures in those rates (Palmer, 1971). In another study, Boor (1976) compared suicide rates in ten countries—New Zealand, Israel, the United States, Canada, Italy, Australia, West Germany, France, Japan, and Sweden—and correlated those rates with mean scores on an internal–external control scale. The results indicated that cultures that foster high perceptions of external control are associated with higher suicide rates. Although this study was conducted more than 20 years ago, its findings are congruent with more contemporary analyses suggesting that suicide may be a product of the collectivity of ideas within a culture in relation to death and life (Kral, 1998). Concerning the cultural dimensions of individualism and collectivism, a study by Levine and Norenzayan (1999) reports that higher rates of suicide occur in individualistic than in collectivistic cultures.

Another factor that may be closely related to culture and suicide is religious beliefs. For instance, suicide is strictly forbidden in the Muslim and Jewish religions and was considered a mortal sin in the early history of Christianity (Kazarian & Persad, 2001). Kelleher, Chambers, Corcoran, Williamson, and Keeley (1998) examined data from suicide rates reported to the World Health Organization and found that countries with religions that strongly condemned the act of suicide had lower reported rates of suicide than countries without religions that strongly condemned suicide. However, the researchers also suggested that the reports may have been biased. Those countries with religious sanctions against suicide may have been less willing to report and record suicides.

There are also within-country differences in rates of suicide. For instance, Shiang (1998) found that in San Francisco, during the period between 1987 and 1996, African Americans, Latinos, and Native Americans had much lower suicide rates than European Americans and Asian Americans. Early and Akers (1993) suggested that having strong religious beliefs and the firm support of the religious community acts as a protective factor against suicide for the African American community. Nonetheless, the suicide rates among African Americans have been rising (Chance, Kaslow, Summerville, & Wood, 1998). In Canada, the rate of suicide among aborigines is two to four times the rate among the nonaboriginal population (Health Canada, 1995). Thus, we find varying suicide rates not only between but within countries.

Cross-cultural research over the past few decades has given us important glimpses into this difficult yet fascinating topic. Still, many questions remain unanswered. What is it about culture that produces differences in suicidal behaviors, and why? Why are there still considerable individual differences in attitudes toward suicide even in cultures where it is relatively more acceptable? Despite the glorified stories concerning suicide in Japan, for instance, there is still a relatively strong stigma against it and intense prejudice toward the mental disorders related to it, resulting in reluctance to seek help (Takahashi, 1997). When may suicide be an acceptable behavior in any culture? Given recent and ongoing advances in medical technology, such questions that run the borders of medicine, culture, and ethics are bound to increase in prominence. In the past decade, physician-assisted suicide, brought to national attention by Dr. Jack Kevorkian, has emerged as an issue in the United States. Future research within and between cultures may help to elucidate some of the important decision points as we approach these questions.

#### Summary

In this section, we have discussed a considerable amount of research concerning the influence of psychological, social, and cultural factors on health. We know that these factors can influence rates of mortality, heart disease, and several other disease processes. We also know that cultural discrepancies may be related to health, with greater discrepancies leading to greater stress and consequently more anxiety and greater health problems. We have seen how

culture influences attitudes about body shape, eating, and eating disorders. And we have discussed how culture may play a role in suicidal behaviors. Future studies will begin to bridge the gap between culture as a macroconcept and specific medical disease processes in the body. Whatever the exact mechanisms, the contribution of culture to physical health and disease is clearer now than ever before. Future research will expand our understanding of how and why this relationship exists.

## Cultural Influences on Attitudes and Beliefs Related to Health and Disease

Culture can influence health in many ways. Culture affects attitudes about health care and treatment, attributions about the causes of health and disease processes, the availability of health care and health care delivery systems, help-seeking behaviors, and many other aspects of disease and health care. We are only now becoming aware of the importance of sociocultural differences when developing treatment and intervention programs for medical and psychological problems.

In one study, Matsumoto and his colleagues (1995) recruited Japanese and Japanese American women over the age of 55 living in the San Francisco Bay Area to participate in a study of attitudes and values related to osteoporosis and its treatment. Osteoporosis is a medical disorder in which a decrease in bone density leads to a gradual weakening of the bones. It can be a particularly devastating disease for older women of European or Asian descent. The research included a complete medical history, an assessment of risk factors particular to osteoporosis, an attitudes survey about the disease, and a health care issues assessment. In addition, a subsample of the women were assessed for their bone mineral density (BMD) levels.

Among the most interesting results of this study were the cultural differences found in the attitudes survey and the health care issues assessment. The entire sample of women was divided into two groups: those born and raised in the United States who spoke English as their primary language, and those born and raised in Japan who spoke Japanese as their primary language. When asked about the types of problems they would have if they were diagnosed with osteoporosis, more Japanese than American women reported problems with finances and with finding help. The major concern for American women was "other" problems, including mobility. This finding is especially interesting because mobility is such a central element of individualism, which is more characteristic of the United States than Japan. When asked what kinds of problems they would have if they had to take care of someone with osteoporosis, more Japanese women mentioned not enough time. American women again mentioned "other" problems involving their physical abilities.

The researchers also asked about the types of support services the women would want to have available if they were diagnosed with osteoporosis. More Japanese women reported that they wanted institutions, temporary homes, rehabilitation centers, nursing homes, information services, social service organizations, and organizations to find help. More American women reported wanting "other" services such as medical care.

More American women knew what osteoporosis is. More Japanese women, however, reported that it was of major concern to them and that they would view it very negatively if diagnosed. Also, more American than Japanese women reported that people other than friends or family would care for them if diagnosed. If diagnosed with osteoporosis, Japanese women were more likely to attribute the cause of the illness to fate, chance, or luck; American women were more likely to attribute the illness to diet. Interestingly, there were no differences between the groups in degree of personal responsibility or control, nor in the number of women who specifically asked for osteoporosis examinations, nor in their feelings about estrogen therapy.

A final striking finding was that more Japanese women reported that they would comply with invasive treatment, even though fewer Japanese women had positive feelings about their physicians or reported that they trusted their physicians. This finding is related to the Japanese culture's emphasis on compliance with authority; it suggests that the relationship between interpersonal trust and compliance with authority figures in the Japanese culture is not the same as it is in the United States.

Many other studies also suggest the importance of culture in molding attitudes, beliefs, and values about illness and treatment. Domino and Lin (1993), for example, asked students in Taiwan and the United States to rate various metaphors related to cancer. The metaphors were then scored according to four different scales. The results indicated that the Taiwanese students had significantly higher scores than the Americans on both terminal pessimism and future optimism; that is, they appeared to be both more pessimistic and more optimistic than their American counterparts.

Cook (1994) also reported differences in beliefs about chronic illness and the role of social networks among Chinese, Indian, and Anglo-Celtic Canadians. In his study, Cook asked participants from all three cultural groups to respond to three scales designed to assess psychosocial, phenomenological, and social networking issues related to treatment options, illness, and social support. Data analyses indicated significant differences among the three cultural groups on ratings concerning the phenomenological causes of illness, the psychosocial and phenomenological results of illness, the psychosocial and phenomenological treatment aspects, and in social networks.

Other studies conducted in the past decade also suggest the importance of cultural influences on disease processes. Edman and Kameoka (1997), for example, documented cultural differences between Filipinos and Americans in illness schemas and attributions. Poole and Ting (1995) documented differences between Euro-Canadian and Indo-Canadian patients' attitudes toward maternity care. Mathews, Lannin, and Mitchell (1994) conducted interviews with African American women with advanced breast disease, and commented on the importance of multiple sources of knowledge in coming to terms with the diagnosis of breast cancer in this group of women. Jilek-Aall, Jilek, Kaaya,

Mkombachepa, and Hillary (1997) conducted a study on epilepsy in two isolated tribes in Africa; they reported significant differences in attitudes toward epilepsy, which influenced treatment approaches. Guinn (1998) reported data on Mexican American adolescents documenting the importance of psychological variables such as locus of control in influencing beliefs about health. Sun and Stewart (2000) found that internal locus of control was positively associated with psychological adjustment in a sample of Hong Kong patients with cancer, even though beliefs about supernatural forces are prevalent in this culture. Muela, Ribera, and Tanner (1998) reported on the influence of witchcraft on help-seeking behaviors of Tanzanians in regard to malaria. They found that such beliefs had consequences for noncompliance with treatment, and for delay in seeking diagnosis or treatment.

Other researchers have examined how perspectives on health may vary depending on level of acculturation. Quah and Bishop (1996) asked a group of Chinese Americans about their perceptions of health and also measured their level of acculturation by gathering information on generational status, language spoken, religious affiliation, and endorsement of traditional Chinese values. They found that those who rated themselves as being more Chinese believed that diseases were a result of imbalances in the body, such as excessive cold or excessive heat, in line with traditional Chinese views of illness. Those who rated themselves lower on being Chinese, in contrast, believed that diseases were a result of viruses, in line with the Western biomedical view of illness. The researchers also found that those who believed in the traditional Chinese views of health and disease were more likely to turn to a practitioner of traditional Chinese medicine when seeking medical help. Another study of acculturation and health involving Asian Canadians found that those with higher orientations toward Asian culture were more likely to endorse the traditional Chinese view of health than did those with higher orientations toward Western culture. Furthermore, those endorsing traditional Chinese medical beliefs also reported being less satisfied with Western medical care (Armstrong & Swartzmann, 1999).

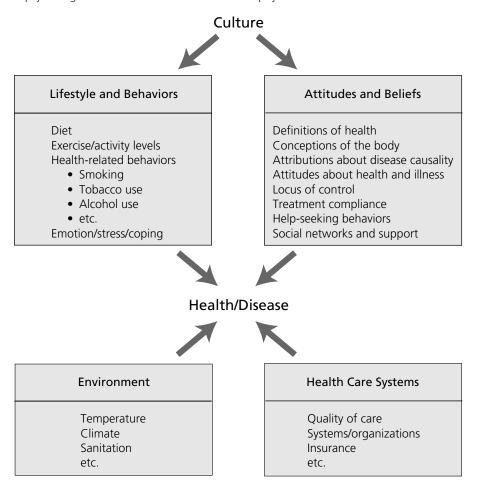
Taken collectively, a growing literature in the field is showing an increased awareness of cultural influences on a host of psychological variables that ultimately have implications for health and disease. These findings suggest that health care providers need to deal not only with a patient's disease but also, and perhaps more important, with the psychological correlates of the disease. These may include such variables as attributions and beliefs about the causation of disease; attitudes about health, illness, and treatment; preferences with regard to social support and networks; psychosocial needs with regard to autonomy versus reliance on others; and treatment compliance. Also, we cannot forget cultural differences in attitudes about body shapes and in definitions of health and disease, discussed earlier in this chapter. Contemporary health practitioners and the institutions in which they work—clinics, hospitals, laboratories—have become increasingly sensitized to these issues, and are now struggling with the best ways to understand and incorporate them for maximum effectiveness.

## A Model of Cultural Influences on Physical Health

So far in this chapter, we have reviewed a considerable amount of literature concerning the influence of culture on health and disease processes. This research has begun to affect the ways in which we deliver treatment and other services to people of varying cultural backgrounds, and the type of health care systems we create. It has also made scholars in the field more sensitive to the need to incorporate culture as a major variable in their studies and theories.

So, just how does culture influence physical health and disease processes? Figure 8.1 summarizes what we know so far. We know from other research, not reviewed in this chapter, that culture affects rates of alcohol consumption, tobacco use, and exercise and activity levels. Each of these variables, in turn, has implications for health and disease. The research concerning the relationship between cultural dimensions and the incidence of various diseases also

Figure 8.1 A psychological model of cultural influences on physical health



implicates lifestyles and behaviors as possible mediators. In particular, research seems to suggest that stress and emotion, and the ways we cope with them, are important determinants of health and well-being.

We have also discussed the contribution to health and disease of other psychological factors, most notably attitudes and beliefs about disease processes, causations, treatment, and help seeking. Finally, although this chapter has focused on the role of sociocultural factors in health and disease, we cannot ignore the contributory roles of the environment and available health care systems in promoting health and well-being.

Figure 8.1 is meant to provide a general overview of the role that culture and other social factors may play in the area of physical health. All of these factors will need to be fleshed out in greater detail, then tied together into a comprehensive and systematic whole to further our understanding of health and disease processes. Future research will also need to operationalize health according to dimensions other than mortality rates or incidence rates of various diseases. Incorporating cultural, environmental, social, and psychological factors in determining multiple definitions of health is an enormous job for the future, but it is one that we must work toward if we are to get a clearer and more complete picture of the relative contribution of all these factors.

## **Cultural Differences in Dealing with Illness**

In this final section of the chapter, we turn to the question of how health care professionals can provide appropriate and sensitive treatment and other health care services to a diverse population. We begin with a review of differences in health care and medical delivery systems around the world, and then look at some research on the development of culturally sensitive treatment approaches.

# Differences in Health Care and Medical Delivery Systems

Different countries and cultures have developed their own unique ways of dealing with health care. A country's health care delivery system is a product of many factors, including social and economic development, technological advances and availability, and the influence of neighboring and collaborating countries. Also affecting health care delivery services are a number of social trends, including urbanization, industrialization, governmental structure, international trade laws and practices, demographic changes, demands for privatization, and public expenditures.

National health systems can be divided into four major types: entrepreneurial, welfare-oriented, comprehensive, and socialist (Roemer, 1991). Within each of these general categories, individual countries vary tremendously in terms of their economic level. For instance, the United States is an example of a country with a relatively high economic level that uses an entrepreneurial

system of health care, characterized by a substantial private industry covering individuals as well as groups. The Philippines and Ghana also use an entrepreneurial system of health care, but have moderate and low economic levels, respectively. France, Brazil, and Burma are examples of high-, moderate-, and low-income countries with welfare-oriented health systems. Likewise, Sweden, Costa Rica, and Sri Lanka have comprehensive health care, and the former Soviet Union, Cuba, and China have socialist health systems.

A quick review of the countries listed here suggests that cultural differences are related to the type of national health system a country is likely to adopt. It makes sense that an entrepreneurial system is used in the United States, for example, because of the highly individualistic nature of American culture. Likewise, it makes sense that socialist systems of health care are used in China and Cuba, given their collectivistic, communal nature. However, cultural influences cannot be separated from the other factors that contribute to national health care systems. In the complex interactions among culture, economy, technology, and government, social aspects of culture are inseparable from social institutions.

## The Development of Culturally Sensitive Treatment Approaches

In the past decade, a number of important studies have examined the issue of culturally sensitive treatment approaches for people of diverse cultural backgrounds. In the past, at least in the United States, health professionals and medical communities tended to approach health and the treatment of physical diseases in all people similarly, with the underlying assumption that people's bodies are all the same. As the American population has diversified, however, and as research continues to uncover more ways in which people of different cultural backgrounds differ from one another, the health professions are slowly becoming aware of the need to develop culturally sensitive and appropriate treatment approaches.

The need for such approaches is borne out in the literature. Ponchilla (1993), for example, reports that cultural beliefs among Native Americans, Mexican Americans, and Pacific Islanders affect the success of health-related services to native peoples who are suffering vision loss as a result of diabetes. These cultural beliefs include the circle of life, identification with persons with disabilities, the value of silence, and even the healing power of blindness itself. Ponchilla also suggests that the increase in the incidence of diabetes among these cultural groups is due to their adoption of Western diets and lifestyles.

Other findings also suggest the influence of culture on treatment success.

Wing, Crow, and Thompson (1995) examined barriers to seeking treatment for alcoholism among Muscogee Indians, and found that this group traditionally perceives alcoholism to be caused by a lack of spirituality. Admission of alcohol abuse thus causes embarrassment and shame, and the practice of humility in Western-oriented alcoholism programs hinders treatment. Talamantes,

Lawler, and Espino (1995) examined issues related to caregiving and the use of hospice services by Hispanic American elderly, who are less likely to use such long-term care services. They found that factors affecting level of use included alienation; language barriers; availability of culture-sensitive services; beliefs regarding illness, suffering, coping, and death; socioeconomic and demographic factors; acculturation; and the availability of informal care, most notably via extended family and community support. Delgado (1995) also pointed out the importance of such natural support systems among the Hispanic cultures in the treatment of alcoholism.

Studies of other cultural groups also highlight the importance of families and communities in the treatment of health-related problems. Nemoto and colleagues (1998), for example, examined cultural factors such as family support in the treatment and prevention of drug abuse in Filipino and Chinese individuals. More specifically, they examined factors that prevent drug abuse and the escalation of drug use in these groups, including family support, cultural competence, religious beliefs, and life satisfaction. One of the interesting findings of this study was that some drug users received financial support from family members who knew the recipients' drug habits. Family members tried not to talk about the problems in the family, yet continued to provide financial support to the user. The authors concluded that culturally sensitive and appropriate treatment needs to involve the immediate family and extended family members if the treatment is to be effective. These and other findings suggest that health problems arise as much from a collective system of individuals and social agents as from a single individual. This collective system, therefore, must be engaged if treatment is to be relevant and effective.

Armstrong and Swartzman (2001) also point out the need to understand how different cultures speak and communicate about illnesses. For instance, people from a collectivistic culture may not directly tell a doctor what is bothering them, but may be much more circumspect in describing their illness. If the doctor has an individualistic orientation and is much more direct in trying to find out what is ailing the patient by asking pointed, direct questions and expecting direct answers, this may cause distress for the patient and may hinder both the patient and the health care provider in dealing with the illness.

It is extremely difficult to grasp the complexity that culture brings to the development of successful and effective treatment approaches. Besides family issues, a host of variables may include religion and spirituality, social support networks, beliefs and attitudes about causes and treatments, socioeconomic factors, language barriers, shame, face, and many others. Although some culturally relevant programs have been shown to be successful (for example, Uziel-Miller, Lyons, Kissiel, & Love, 1998; Damond, Breuer, & Pharr, 1993), others have not (for example, Rossiter, 1994). Thus, it is not clear what the exact ingredients for successful treatment interventions are, and whether these ingredients differ depending on the cultural group or individual that is seeking help. Basic educational programs about health and disease prevention that tap cultural groups in relevant ways may be a relatively easy way to access many individuals. One such program (Hiatt et al., 1996) investigated knowledge, prac-

tices, and attitudes of 4,228 women from five ethnic groups in the San Francisco Bay Area with regard to barriers to using breast and cervical cancer screening tests. Latina, white, and black women had screening levels that were higher than national averages; Chinese and Vietnamese women, however, did not. The data underscored the importance of basic educational programs that may help make it easier for more women to obtain such screenings at earlier ages, thus increasing the potential for effective treatment if and when problems are found.

Clearly, the field is still struggling to discover what the most important culturally relevant variables are and whether these variables are similar or different across cultural groups. Our guess would be that there are some culture-constant needs that need to be addressed, but that these needs are manifested in different ways in different attitudes, values, beliefs, social support, extended families, and the like. Future research has a large job in evaluating the host of potentially important variables to distill a set of guidelines that can be useful for health care professionals in their attempts to improve people's lives.

## **Conclusion**

Many factors contribute to health and disease processes. Besides effects of the environment, diet, directly health-related behaviors (smoking, alcohol consumption), and health care availability, culture is also a major factor. Understanding the role that culture plays in the development of disease, whether medical or psychological, will take us a long way toward developing ways of preventing disease in the future. As research uncovers the possible negative consequences of cultural tendencies, we can also look to an understanding of cultural influences to help us treat people of different cultures better than we have in the past.

In this chapter, we have examined how cross-cultural research has attempted to explore the influence of culture on physical health. We have seen how different cultures have different definitions of health and disease, and different conceptions of the body. We have reviewed a considerable amount of research that shows how culture appears to be related to a number of different disease processes around the world. This literature complements the already large literature that highlights the importance of other psychosocial determinants of health and disease, such as personality and socioeconomic status. We have also seen how individual cultural discrepancies may be related to health, and how culture influences specific behaviors such as eating and suicide. We have explored the nature of culturally relevant and sensitive treatment approaches, including the importance of family and community in some cultural groups.

Still, much remains to be learned, and many questions remain unanswered. What is the relative contribution of cultural variables to the development of disease or the maintenance of health, in relation to other determinants such as psychological, social, demographic, economic, and environmental factors? What is