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Health Psychology Today and Tomorrow

I wasn’t always interested in health. Like many students, when I enrolled at Columbia University in the fall of 1979, I was blessed with a sound mind and body that I took for granted. I rarely exercised, ate too much fast food, slept too little, and even began smoking cigarettes—to “cope” with the stress of grad school, I rationalized. Nor was I interested in what psychology might contribute to our understanding of health. My schedule of classes and research focused on learning theory, neurobiology, and cognition.

Things began to change, however, when I decided to branch out and study applied social psychology with Professor Stanley Schachter. His distinctive approach to research was breaking new ground in the study of emotions, obesity, and addiction. Unlike most of his peers, Schachter always focused on the broader context in which social behaviors were embedded. Nowhere is this more evident than in his effort to understand the biological processes involved in seemingly social phenomena, such as increased cigarette smoking at parties or in response to stress. Much of the emerging field of health psychology was rooted in Schachter’s work. I began to see a clearer path toward the contributions to humanity that I was hoping to make. Psychology for me became a tool to promote health.

As my professional interests shifted, my personal interests followed. I recall one seminar when Stan, who was struggling to quit smoking himself, asked me when I was going to take up the battle against nicotine addiction. “Why don’t you apply what you’ve learned here to your own life?” he asked. So I began to do so, and I’ve tried to be faithful to Schachter’s challenge ever since. It was tough, but I did quit smoking many years ago. I also exercise, eat a more nutritious diet, and follow a healthier sleep schedule. As new research findings have come along, I’ve tried to incorporate them into how I cope with stress;
the efforts I make to keep strong, positive, social connections with others; and how I appraise the events around me.

My hope is that this book has sparked your interest in the field of health psychology—for some of you as a profession, and for all of you as a tool in promoting your own better health and the health of those in your life whom you care about!

Health psychology has traveled a long way since the American Psychological Association first recognized it in 1978. My goal in this closing chapter is to look back—to review what has been accomplished along the way—and to look ahead to the most pressing challenges of the future. Although we will focus on health psychologists’ contributions to various health-related goals, it is important to remember that they are not working alone. The medical profession and others in the health care industries all work together to achieve these ends.

Health Psychology’s Most Important Lessons

The science of health psychology remains in its infancy, and its contributions are still unfolding. Thus, much work remains to be done. Yet virtually all health psychologists agree that lessons have been learned during the past three decades of research that all of us should heed.

Lesson 1: Psychological and Social Factors Interact with Biology in Health

As we have seen, for many diseases, heredity plays a small role, and not every person with the same genetic vulnerability to a disease eventually gets it. Bacteria, viruses, and other microorganisms cause some diseases, but being exposed doesn’t guarantee that a person will become ill. Stress, negative emotions, coping resources, healthy behaviors, and a number of other factors affect our susceptibility to disease, the progression of disease, and how quickly we recover (if at all).

Behavior, mental processes, social influences, and health are intimately connected. This is the fundamental message of the biopsychosocial model of health. Even those among us with “hardy” genes and healthy immune systems can become ill if we engage in risky health behaviors, live in unhealthy social and physical environments, and develop a negative emotional style and poor stress-management techniques.
Unhealthy Behaviors and Social Alienation

The evidence is clear: Unhealthy behaviors such as smoking, alcohol use, poor nutrition, and inactivity lead to, or at least accelerate, the occurrence of illness and disease. For example, extensive research has eliminated any doubt that smoking is causally related to lung cancer and that alcohol use is related both to diseases of the liver and to traffic fatalities. Similarly, a low-fiber, high-fat diet increases a person’s risk of developing cardiovascular disease and some forms of cancer. And, of course, a sedentary life increases the risk of cardiovascular disease and certain kinds of cancer and results in poorer immune functioning.

Numerous studies suggest that psychosocial factors can also affect the development and progression of diseases ranging from a simple cold to chronic conditions such as cardiovascular disease, cancer, and AIDS. Among the psychosocial factors that affect cardiovascular health are socioeconomic status (SES), gender, race, employment, acute and chronic stress, social support versus isolation, anger, and depression (Kuper and others, 2006). The impact of these factors often equals or exceeds that of more traditional risk factors such as hypertension, diabetes, and even smoking (Sher, 2008).

Psychosocial factors are also linked to life expectancy. As a specific example, prospective studies demonstrate that social support reduces the risk of mortality independent of other factors, such as gender and ethnicity. Lisa Berkman and her colleagues (2004) investigated a sample of 16,699 French workers, obtaining a social integration score for each participant based on marital status, contacts with friends and relatives, church membership, and other group memberships. Over a seven-year follow-up, and after adjustment for age, smoking, alcohol consumption, body mass index (BMI), and depressive symptoms, men with low social integration scores had a 2.7 times greater risk of dying than did men with high scores; for women, the rate was 3.64 times greater.

Researchers cannot yet unequivocally state exactly why social integration protects against chronic disease. So far, the most valid hypotheses proposed include the following: Social support may buffer the effects of stress on the body; social support may influence positively health behaviors associated with disease (such as diet and exercise); and social support may affect directly the underlying physical mechanisms associated with disease. In support of the physical mechanisms hypothesis, researchers have found that social integration is negatively correlated with several inflammatory and immune system markers of cardiovascular disease. In fact, the link between close relationships and immune functioning and immune function is one of the most robust findings in the psychoneuroimmunology literature (Fagundes and others, 2011). Relationship conflict and the perception of weak social support in one’s life can effectively modulate proinflammatory cytokine secretion both directly (via central nervous system/neural/endocrine/immune biobehavioral pathways), and indirectly, by promoting depression, emotional stress responses, and unhealthy behaviors (Kiecolt-Glaser, Gouin, & Hantsoo, 2010). Interestingly, people also expect to live longer when they perceive strong social and emotional support.
in their lives (Ross & Mirowsky, 2002). Consequently, many hospitals strongly recommend—and in some cases even require—that patients enroll in social support groups during the recovery period following major surgery.

**Stress**

Since the pioneering stress research of Hans Selye (discussed in Chapter 4), there has been mounting evidence that poor stress management can take a negative toll on health, both directly and indirectly, increasing the risk of many chronic diseases, altering the progression of those diseases, and undermining the effectiveness of treatment (Cohen, Janicki-Deverts, & Miller, 2007; also see Figure EP.1). Over the past 35 years, health psychologists have delineated the various possible consequences of how a person responds to daily hassles, occupational demands, environmental stressors, and other challenging events and situations. We now understand many of the physiological mechanisms by which stress adversely affects health and increases the likelihood of illness. For example, poorly managed stress can result in elevated blood pressure and serum cholesterol levels (Rosenthal & Alter, 2012).

Some of health psychology’s most dramatic findings have focused on immune function. For example, temporary psychological stress, including exam taking or daily hassles, can decrease immune function (Robles, Glaser, & Kiecolt-Glaser, 2005), especially in people who have poor coping skills and in those who magnify the impact of potential stressors and appraise them as uncontrollable. In addition, chronic stress, such as that arising from natural disasters or caring for a spouse with Alzheimer’s disease, can reduce immunocompetence (Haley and others, 2010). These findings are part of the burgeoning field of psychoneuroimmunology (PNI). When we have a calm sense of being in control, we tend to have a comparable emotional and physiological reaction. When we become angry or fearful or feel hopeless because we believe a situation is out of our control, we tend to become emotionally aroused, and consequently our physiological response is more dramatic. Because we know that reactions such as these, if repeated and chronic, can promote illness, it is important for us to learn to manage our thoughts and emotional reactions.
Lesson 2: It Is Our Own Responsibility to Promote and Maintain Our Health

Our society has become increasingly health conscious. As a result, more of us realize that the responsibility for our health does not rest solely in the hands of health care professionals; rather, we ourselves have a major role to play in determining our overall well-being.

As a nation, for example, Americans have become well informed about the hazards of smoking, substance abuse, poor dietary practices, and sedentary living. We know, too, that stress, our emotional temperament, the quality of interpersonal relationships, and coping resources are important factors in health. We have learned about the importance of having regular checkups, adhering to our prescribed treatment, and seeking early detection screening for various chronic illnesses, especially if our age, gender, race, or ethnicity places us in the “high-risk” group for these conditions. And today, unlike in the last 20 years, people can inquire about health issues and communicate with health providers by tapping into the computer-driven resources of telemedicine.

This awareness does not guarantee that people will follow through on what they know to be the healthiest course of action. A series of midcourse reviews of progress toward the 467 objectives of Healthy People 2010 demonstrated mixed progress for Americans. The findings included the following:

- Worsening trends in the percentage of overweight and obese individuals, and little or no change in the status of most objectives for dietary intake, physical activity, and fitness
- Continued decline in the three leading causes of death (heart disease, cancer, and stroke), which may be partly due to decreased tobacco use and a modest shift of dietary patterns toward less saturated fats and no trans-fatty acids
- A leveling off in the number of new cases and deaths from AIDS
- Increasing use of preventive and early-detection health services, including Pap smears, mammograms, and childhood immunization
- Continued increase in life expectancy
- Continued decline in the infant mortality rate

Clearly, Americans have made some gains in improving their health habits. Yet the report also notes that nearly 1 million deaths in this country each year are preventable, to wit:

- Control of underage and excess use of alcohol could prevent 100,000 deaths from automobile accidents and other alcohol-related injuries.
- Eliminating public possession of firearms could prevent 35,000 deaths.
- Eliminating all forms of tobacco use could prevent 400,000 deaths from cancer, stroke, and heart disease.
- Better nutrition and exercise programs could prevent 300,000 deaths from heart disease, diabetes, cancer, and stroke.
Reducing risky sexual behaviors could prevent 30,000 deaths from sexually transmitted infections.

Providing full access to immunizations for infectious diseases could prevent 100,000 deaths.

It has become quite evident that unhealthy lifestyles are much harder to change than they are to prevent in the first place. Although lifestyle interventions often meet with initial success, too many people “fall off the wagon.” Ex-smokers, former heavy drinkers, weight-loss program participants, and those who are new to exercise programs too often fall back into their old bad habits, a problem that must continue to be a focus for future health psychologists.

Lesson 3: Unhealthy Lifestyles Are Harder to Change Than to Prevent

Good nutrition, fitness, responsible drinking, and healthy management of body weight, stress, and social relationships are lifelong challenges that are best begun at a young age. Most smokers, for example, take up the habit during adolescence, usually before they graduate from high school. But as we have seen, preventing smoking, like preventing certain risky sexual activities, is a daunting challenge. Many people, especially young people, are more heavily influenced by the immediate “rewards” of smoking—the stimulating “kick” from nicotine, the self-image of doing something that seems mature or perhaps rebellious, wanting to fit in with their peers who are trying smoking—than by worries about long-term health consequences.

Preventing poor health habits from developing in the first place will continue to be a high priority for health psychology. New research will investigate the most effective and efficient interventions for reaching the largest number of people in the workplace, schools and universities, and the community. The use of behavioral immunization programs, such as those targeting adolescents most likely to engage in risky sex, smoking, drug abuse, undereating or overeating, and other self-antigens, also will continue to grow (Lewitus & Schwartz, 2009). For some health behaviors, interventions will probably need to target even younger “at-risk” individuals. Among these are pediatric “well-parent/well-child” programs designed to teach new parents how to minimize the risks of accidents in the home and car and how to start their youngsters off on a lifetime of healthy eating and cardiopulmonary fitness.

Lesson 4: Positive Stress Appraisal and Management Are Essential to Good Health

One of health psychology’s most important contributions in the area of stress and health has been the resolution of the controversy regarding whether stress is external or internal. Research has clearly revealed that it is both: Stress is a transaction in which each of us must adjust continually to daily challenges.
As we learned in Chapters 4 and 5, each of life’s stressful events can be appraised as either a motivating challenge or a threatening obstacle. Viewing life’s stressors as challenges that we can handle helps us maintain a sense of control and minimizes the impact of stress on our health. Learning to manage the stress that we encounter is crucial to our physical, psychological, and emotional well-being. Research has revealed the benefits of several stress-management strategies: keeping stress at manageable levels; preserving our physical resources by following a balanced diet, exercising, and drinking responsibly; establishing a stress-busting social network; increasing our psychological hardiness; disclosing our feelings when something is bothering us; cultivating a sense of humor; reducing hostile behaviors and negative emotions; and learning to relax.

Health Psychology’s Future Challenges

Most of health psychology’s challenges stem from two major research agendas. The first is the U.S. Department of Health and Human Services report Healthy People 2020, which, as we have seen, outlined the nation’s highest priorities for promoting health and preventing disease among all Americans. The report was based on the best judgments of a large group of health experts from the scientific community, professional health organizations, and the corporate world. The report’s health objectives were organized under four overarching goals:

- Attaining high-quality, longer lives free of preventable disease, disability, injury, and premature death
- Achieving health equity, eliminating disparities, and improving the health of all groups
- Creating social and physical environments that promote good health for all
- Promoting quality of life, healthy development, and healthy behaviors across all life stages

The second research agenda, produced by the American Psychological Association in collaboration with the National Institutes of Health (NIH) and 21 other professional societies, focuses more specifically on health psychology’s role in health care reform. Doing the Right Thing: A Research Plan for Healthy Living identified four research tasks, out of which emerge the five challenges that we will discuss in this section.

Challenge 1: To Increase the Span of Healthy Life for All People

The rapid aging of the population draws our attention to a crucial challenge: developing effective interventions that will enable older adults to maintain the highest possible level of functioning, or to improve it, for the greatest number of years.
Healthy life is a combination of average life expectancy and quality of life. The challenge for health psychology is to increase the healthy life expectancy, or average number of **quality-adjusted life years (QALYs)** that a person can expect to live in full health—an index of a person’s biological age rather than his or her chronological age—along with a **compression of morbidity**—which refers to a shortening of the amount of time that people spend disabled, ill, or in pain. To illustrate, consider twin brothers who, although genetically identical and exposed to the same health hazards while growing up, have had very different health experiences since adolescence. The first brother smokes two packs of cigarettes a day, has an obesity-indicating BMI of 30.2, never exercises, has an angry and pessimistic outlook on life, and eats foods containing excessive amounts of animal fat and sugar. The second brother pursues a much healthier lifestyle, avoiding tobacco and excessive stress, exercising regularly, watching his diet, and enjoying the social support of a close-knit circle of family and friends. As Figure EP.2 shows, although the two brothers have the same genetic vulnerabilities to lung, circulatory, and cardiovascular disease, the unhealthy lifestyle of the first brother dooms him to an extended period of adulthood morbidity beginning at about age 45. In contrast, the healthier brother’s lifestyle postpones disease until much later in life. If he does contract any of the illnesses, they are likely to be less severe, and recovery will be quicker. In some cases, the illness, such as lung cancer, may be “postponed” right out of his life.

We have achieved some success, but there is room for much additional improvement. Overall, global healthy life expectancy at birth for women and men combined is currently only 57.7 years, 7.5 years lower than total life expectancy at birth (Zhao and others, 2013). This discrepancy between life expectancy and

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**Inspirational Father–Son Team** Dick Hoyt was inspired by his then-teenage son Rick, who has congenital physical disabilities, to train for and compete together in a running race for charity. Rick loved the experience and told his dad that for the first time, while flying along in his specially designed wheelchair, he didn’t feel disabled. The pair has gone on to compete in hundreds of athletic competitions—including marathons and Ironman triathlons—over the past 30 years.
well years is even larger when we compare various socioeconomic groups and other countries of the world (Horton, 2012). Lower SES status is associated with shorter average life expectancy and fewer well years. Around the world, the percentage of life expectancy lost to disability ranges from less than 9 percent in the healthiest regions to more than 14 percent in the least healthy areas.

**Challenge 2: To Reduce Health Disparities and Increase Our Understanding of the Effects of Gender, Culture, and Socioeconomic Status on Health**

Historically, several measures of health have shown substantial differences among various ethnic and sociodemographic groups, as well as between the genders. For example, life expectancy at birth for African-Americans has risen since 1950 but remains noticeably lower than that for European-Americans (National Center for Health Statistics, 2012). Compared with European-Americans, African-Americans have higher mortality rates in every age group and are more likely to suffer from many chronic health conditions—including heart disease, cancer, stroke, and AIDS—as well as fatal on-the-job injuries (CDC, 2011c). Research studies focused on Hispanics/Latinos and Native Americans reveal similar disparities. Asking people about their health reveals even greater differences by ethnic group, as shown in Figure EP.3. The reasons for these discrepancies are undoubtedly complex but may include unequal access to health care, genetic susceptibility to specific diseases, and lifestyle differences.
The negative effects of ethnicity and poverty on health may be the result of factors such as poor nutrition, crowded and unsanitary environments, inadequate medical care, stressful life events, and subjective perceptions that environmental stressors are beyond one’s ability to cope. Another factor is less effective use of health screening among certain groups. For example, African-American women delay longer than white women in seeking care for breast symptoms, and older women, who frequently are at increased risk of breast cancer, are less likely to seek preventive care.

However, ethnic group disparities in health are not completely attributable to the social conditions in which people live. For example, Hispanic-Americans generally fare as well as or better than European-Americans on most measures of health, actually having a lower death rate than European-Americans from heart disease, lung cancer, and stroke. This is paradoxical, given the high rates of hypertension, obesity, and tobacco use among Hispanic-Americans. Some researchers believe that this puzzling fact reflects a lag in acculturation because the same trend can be found in all immigrant groups: As immigrants adopt an American lifestyle, they eventually develop the same patterns of illness and mortality.

Another factor that may be important is education. Regardless of ethnicity, people who have achieved higher levels of education live longer and have better overall health than those with less education, most likely because people with fewer years of education generally are more likely to engage in unhealthy behaviors such as smoking and eating a high-fat diet than those with more years of education.

Health psychologists have not been able to pinpoint the reasons for the discrepancies because, until recently, what they knew about health and disease derived from research that was disproportionately concentrated on young,

### Figure EP3

**Quality of Health by Ethnic Group and Gender**

When asked to describe their health, a surprisingly high percentage of all ethnic groups used “fair” or “poor.” Except among Native Americans, women are more likely than men to describe their health in negative terms. Even more telling are the differences between ethnic groups, with whites having the most positive view of their health and Native Americans being least positive.

relatively healthy, white male subjects. Health psychologists have begun to widen the scope of their research to include a more diverse pool of research participants, and in some cases to focus specifically on understudied groups. For example, they have found that women and men have very different psychological, social, and biological characteristics and vulnerabilities, so they differ in their susceptibility to various diseases and in their coping reactions to stress. The same seems to be true of many different ethnic and racial groups.

Clearly, much more research is needed before health psychologists can confidently explain why there are health discrepancies among traditionally understudied groups. One attempt to fill the void was provided by the Women’s Health Initiative (WHI), a long-term national health study focusing on the prevention of heart disease, breast and colorectal cancer, and osteoporosis in postmenopausal women. The research (WHI, 2010) focused on the effects of the social environment and individual characteristics on health (Figure EP.4) and included three components:

- A randomized, controlled clinical trial of 64,500 women testing the impact of a low-fat diet, hormone replacement therapy, and calcium–vitamin D supplementation
- An observational study of another 100,000 women, examining the biological and psychological determinants of these chronic diseases in women
- A massive study evaluating eight different model education/prevention programs in communities throughout the United States

Globally, there is an even stronger need to focus on the predictors of women’s health. For too many years, research in many fields—including health psychology—focused largely on samples of young, white, upper-SES men who were attending college. This, of course, was due to the easy access that researchers had to this population. As we have seen, however, women have been excluded

Figure EP.4
Sociodemographic Characteristics and Health-Related Quality of Life in Women
One goal of the Women’s Health Initiative (WHI) was to understand the factors that contribute to the health of postmenopausal women and to evaluate the efficacy of practical interventions in preventing the major causes of morbidity and mortality in older women. The model depicted here, which suggests that the effects of the social environment and individual dispositions influence a woman’s health through her health-related behaviors and intermediate biological outcomes, was the foundation of the multiyear research program.

from medical studies for many reasons, and this has limited our knowledge about factors that influence women’s health. As Neil Grunberg, my friend and former classmate and a renowned NIH researcher, noted more than 20 years ago:

“Research on health and behavior should consider men and women—not because it is discriminatory not to do so—but because it is good science. The study of women and men, of young, and old, of African Americans and Caucasians, Asians, Latinos, and American Indians will all help to reveal psychosocial and biological mechanisms that are critical to understanding mortality, morbidity, and quality of life” (quoted in Baum & Grunberg, 1991).

Challenge 3: To Achieve Equal Access to Preventive Health Care Services for All People

As we have seen throughout this book, many minorities and impoverished Americans of every ethnicity and race have limited access to preventive health care. And there is a disproportionate concentration of certain minority groups in unhealthy neighborhoods. These are some of the reasons why minorities and the poor tend to suffer more health problems and have a higher mortality rate. In 2012, more than 47 million working Americans (about one in six) had no health insurance, and hundreds of millions more had difficulty paying medical bills (Young, 2013), making every day, in effect, a roll of the dice with respect to their health. Health psychology faces the continuing challenge of understanding barriers that limit access to health care and assisting in their removal.

The United States does a poorer job than any other industrialized nation in making health care available to all its citizens. Although we have the most costly health care system in the world, it is not the best (Figure EP.5). For example, we...
rank only twenty-first in the world in infant mortality, sixteenth in life expectancy for women, and seventeenth in life expectancy for men. Health care costs have risen sharply in the past 50 years. In 1960, health care costs represented only 5.1 percent of the gross domestic product (GDP) of the United States. Today, the United States spends $8233 per person (17.6 percent of GDP) on health care. Although this amount is more than two-and-one-half times more than most developed nations in the world, the United States has a lower average life expectancy than that in other affluent countries, fewer physicians and hospital beds per person, and was ranked by the World Health Organization only thirty-seventh out of 191 countries in terms of the overall performance of its health care system, as measured by such factors as responsiveness, fairness of funding, and accessibility by all individuals (OECD, 2011). As we have seen, one reason for these low rankings is the tremendous disparity in the environmental conditions in which Americans live. Underscoring the impact of this disparity in environmental conditions, the Children’s Defense Fund (2011) recently issued a report called *The State of America’s Children*, which outlined the following threats: poverty, lack of health care, substance abuse, crime and dangers in the environment, abuse and neglect at home, inadequate child care, poor schools, teen pregnancy, and absent parents. It is obvious that each of these threats, either directly or indirectly, can have a powerful impact on children’s health.

So long as some people have access to quality health care while others have no access, we will have a two-tiered health care system in this country: state-of-the-art, high-tech care for those who have managed to get health insurance and substandard care (or no care) for everyone else. Health care reform remains a continuing challenge—for health psychology as well as for the national political agenda.

On March 23, 2010, President Barack Obama signed into law the Patient Protection and Affordable Care Act (PPACA), the most significant overhaul of U.S. health care in nearly 50 years. The primary goals of the new law, which takes full effect in 2014, are to decrease the number of people who do not have health insurance and to lower the costs of health care. Additional reforms to be rolled out over the next several years are aimed at improving health care outcomes and streamlining the delivery of health care. In addition, under PPACA, insurers will be required to cover certain types of preventive care at no cost to the consumer, including blood pressure and cholesterol tests, mammograms, colonoscopies, and screenings for osteoporosis.

**Challenge 4: To Adjust the Focus of Research and Intervention to Maximize Health Promotion with Evidence-Based Approaches**

In the past, health psychology followed biomedicine’s lead in focusing on mortality rather than morbidity. Even when prevention was stressed, health psychologists tended to focus on those chronic diseases that were the leading
causes of death. Although reducing mortality will continue to be a priority, health psychology also must devote greater attention toward conditions such as arthritis, which have a minimal impact on mortality rates but a dramatic impact on wellness among the elderly.

A related challenge is to place more emphasis on health-enhancing behaviors and factors that may delay mortality and reduce morbidity. In the past, health psychologists focused more of their research on studying risk factors for chronic disease and less of their research on learning about health-promoting behaviors that help prevent people from developing illnesses. The positive psychology movement is beginning to address this imbalance, as researchers pay greater attention to promoting healthy individuals, healthy families and communities, and healthy workplaces. A continuing challenge for health psychology is to employ evidence-based approaches through documentation of the effectiveness of various interventions. This issue comes into sharp detail as the debate continues over the extent to which psychological interventions should be covered by managed health insurance. Even the most exciting new intervention—if backed only by weak or poorly conducted research studies—is likely to meet with the same skeptical reaction from health care professionals that many complementary and alternative therapies have faced (see Chapter 15). Complicating the research picture, true primary prevention studies often take decades to complete, and they require expensive, long-term funding. Fortunately, the U.S. Centers for Disease Control and Prevention (CDC) has shown considerable interest in continuing behavioral intervention research.

Despite health psychology’s successes, much remains to be done before the goals of Healthy People 2020 are fully met. Although health psychologists continue to focus on eliminating health disparities among various sociocultural groups, emphasis has been shifted away from targeting special groups in favor of improving the health of all Americans.

**Challenge 5: To Assist in Health Care Reform**

Historically, health care in the United States has faced three fundamental problems: It has been far too expensive, not all citizens have had equal access to high-quality health care, and its services often have been used inappropriately. For many years, researchers therefore predicted a major revolution in the U.S. health care system. Among the issues needing to be addressed has been universal access to health care, comprehensive mandated health benefits, cost containment, quality, accountability, and a shift in emphasis from secondary prevention to primary prevention. While the PPACA addresses many of these issues, unfortunately health care in this country continues to focus much more on expensive inpatient care (and other efforts at secondary prevention) than on cost-effective primary prevention and health promotion.

To improve health care while cutting costs is among the most pressing of needs. One of health psychology’s most fundamental messages is that prevention and health promotion or maintenance must be made as important in the
health care system as disease treatment is now. As the Institute of Medicine (2011b) itself has noted, health promotion needs to become a standard part of medical practice, and mounting evidence demonstrates the importance of shifting from a model of tertiary care to primary care. Health care also must be defined more broadly so that it doesn’t focus solely on the services provided by doctors, nurses, clinicians, and hospitals. Many health psychologists emphasize the importance of patients taking responsibility for their own well-being, while also recognizing the significant roles played by the individual’s family, friends, and community. More effective health care will recognize that schools, places of worship, and workplaces are major sites for promoting health and should become part of the network of interconnected services in the nation’s health care system.

The role that psychologists play in improving physical health through enhancing treatment outcomes now has been firmly established. This has led to a significant increase in the number of psychologists working in general health care settings. Unfortunately, however, recent efforts to reduce health care costs may threaten this trend. Among hospital administrators and legislators, primary prevention and psychological services are still too often viewed as optional, or even a frill. Current health policy places the greatest emphasis on preventing further episodes of disease in those who are already sick (secondary prevention), rather than on preventing the onset of disease in the first place (primary prevention). Secondary prevention is based on the traditional biomedical (disease) model and usually involves medical diagnosis, medication, surgery, and other procedures that are covered by health insurance. In contrast, primary prevention is based on a behavioral rather than a disease model and typically does not involve diagnosis because there is no disease to diagnose.

One way to estimate the benefits of preventive actions is with combined measures of life expectancy and quality of life years. QALYs can be used to calculate the cost-effectiveness of various primary and secondary prevention efforts. For example, a pharmaceutical treatment, medical screening procedure, or behavior intervention that improves the quality of life by half (0.5) for two people will result in the equivalent of 1 QALY over a period of 1 year. Researchers estimated that the small benefit of regular mammography among women 40 to 49 years of age (increasing life expectancy by only 2.5 days, at a cost of $676 per woman) amounts to a cost of $100,000 for 1 full QALY (Salzmann, Kerlikowske, & Phillips, 1997). As a comparison, researchers have found that regular exercise produces 1 QALY for 2000 to 15,000 euros ($2500–19,500)—a much more modest expenditure relative to many biomedical secondary prevention interventions (Annemans and others, 2007).

Health care policy is not solely to blame. Several recent studies argue that health psychologists have not adapted well to new integrated care models. One such study finds, “Despite the negative impact of failing to make a transformation, most psychologists have not modified their practice and most training programs do not prepare psychologists to provide integrated care” (Bluestein &
Cubic, 2009). Although health psychologists and primary care providers generally share goals and wish to collaborate, they too often are held back from greater collaboration because of differences in their education, clinical styles, and reimbursement systems.

**Psychosocial Interventions**
Health psychologists perform a wide range of activities, including training future doctors and nurses on the importance of psychosocial factors in patient compliance and recovery and directly intervening to assist patients who are facing difficult procedures and adjusting to chronic illness (Table EP.1). Treatment interventions cover every domain of health. In the biological domain, treatment is designed to change directly specific physiological responses involved in the illness. Examples include relaxation to reduce hypertension, hypnosis to alleviate pain, and systematic desensitization to reduce the nausea that often occurs in anticipation of chemotherapy. In the psychological domain, health psychologists have applied both cognitive and behavioral interventions. Cognitive interventions include stress inoculation to decrease anxiety about an upcoming medical procedure, cognitive behavior treatment for depression, and anger management for hostile cardiovascular disease patients. Behavioral interventions include teaching skills to improve patient–provider communication, to develop a behavioral-change program to modify unhealthy habits, and to help train patients in self-management skills such as daily injections of insulin. Social interventions include establishing support groups for those suffering from chronic illness, providing counseling for families of the terminally ill, and conducting role-playing exercises with young children to socially “inoculate” them against being pressured by peers into risky behaviors.

Such psychosocial interventions actually can yield significant cost savings, particularly when used to prepare patients for surgery and other anxiety-producing medical procedures (Novotney, 2010a). Patients who are overly anxious when facing hospitalization and invasive procedures such as surgery often experience a disintegration of normal coping skills. Relaxation training, postsurgical exercises, distraction techniques, and control-enhancing techniques can reduce the length of hospitalization and the need for pain-relieving medication and help prevent disruptive patient behavior. In addition, psychosocial interventions are perceived as effective and desirable by both patients and their families (Arving and others, 2006; Martire, 2005).

The challenge of cost containment is likely to continue because cardiovascular disease and cancer—chronic, age-related diseases that are extraordinarily costly to treat—probably will remain the leading causes of death for some time to come. Health psychology’s emphasis on prevention, if widely employed, would help contain overall expenses, despite the initial cost of additional health personnel. One of the best ways to contain these costs is to help people improve their health behaviors to avoid getting sick and to help those who become sick to recover as quickly as possible.
As further testimony to health psychology’s future role in helping the health care system’s efforts to contain costs, the Human Capital Initiative has called for greater use of blended care (also called collaborative care or integrated care; see Chapter 13). This interdisciplinary model, in which treatment teams...
approach diseases from biological, psychological, and sociocultural perspectives, shows great promise in improving treatment while simultaneously cutting costs (Table EP.2).

One medical trend that affects health psychology is the use of integrated primary care (IPC) in treating chronic conditions. IPC combines medical and behavioral health services by bringing all available treatments together into an individualized intervention plan for a patient. A good example of this approach is the coordinated care available to dying patients in hospice settings. This includes palliative care for pain control; symptom management for comfort; and counseling, bereavement, and education for patients and families. IPC allows patients to feel that for any problem they have, they are in the right place.

As we have seen, the potential benefits of integrating health psychology into primary care include better patient retention, higher treatment adherence rates, improved outcomes, and cost. However, challenges remain. Recent meta-analyses have generated mixed results about the effectiveness and cost-effectiveness of IPC. There is a pressing need for more research focused on health psychology interventions in real-world treatment settings. And, as with any research study that attempts to study one variable while controlling others, determining the degree of penetration of health psychology into primary care settings and clarifying the specific roles of health psychologists in integrated care are key issues (Thielke, Thompson, & Stuart, 2011).

The success of blended care reflects health psychology’s growing acceptance by traditional biomedicine over the past 25 years—a trend that is likely to continue into the future (Novotney, 2010b). One sign of this acceptance is the dramatic increase in the number of psychologists working in medical schools and academic health centers—the single largest area of placement of psychologists in recent years (APA, 2006). Increasingly,

### Table EP.2

<table>
<thead>
<tr>
<th>Reduction in Treatment Frequency with Blended Care</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ambulatory care visits</td>
<td>−17%</td>
</tr>
<tr>
<td>Visits for minor illnesses</td>
<td>−35%</td>
</tr>
<tr>
<td>Pediatric acute illness visits</td>
<td>−25%</td>
</tr>
<tr>
<td>Office visits for acute asthma</td>
<td>−49%</td>
</tr>
<tr>
<td>Office visits by arthritis patients</td>
<td>−40%</td>
</tr>
<tr>
<td>Average length of stay in hospital for surgical patients</td>
<td>−1.5 days</td>
</tr>
<tr>
<td>Cesarean sections</td>
<td>−56%</td>
</tr>
<tr>
<td>Epidural anesthesia during labor and delivery</td>
<td>−85%</td>
</tr>
</tbody>
</table>

medical schools recognize that a complete medical education must include, alongside the biological and physical sciences, the perspectives and research findings that have emerged from behavioral and social sciences (AAMC, 2011). Psychologists have become key members of multidisciplinary clinical and research teams in many medical specialties, including family practice, pediatrics, rehabilitation, cardiology, oncology, and anesthesiology. Another sign is the growing role of nurses in delivering psychological services. An increasing number of nurses are obtaining advanced degrees in psychology, and nursing has established the National Institute for Nursing Research (NINR), which focuses on controlled studies of psychological variables in nursing.

Paradoxically, as medical care has grown more specialized and more complex, it also has begun to broaden its scope, incorporating more complementary and alternative aspects of healing. Relaxation training, imagery, and some of the spiritual aspects of non-Western healing traditions are beginning to be accepted by some managed care programs because these methods are typically inexpensive and yet often effective in helping patients cope with a variety of stress-related symptoms. With ever-rising medical costs, the cost-effectiveness ratio of such interventions can’t be ignored.

**International Reform**

As we have seen, there is great variability in the prevalence of specific diseases throughout the world. Poverty, lack of health care, and ignorance generally contribute to a higher incidence of infectious diseases in developing countries than in developed countries. For example, as smoking continues to decline in this country, its prevalence is increasing in developing parts of the world.

Health psychology can take the lead in carrying the messages of the thousands of research studies from developed nations to other parts of the world in which similar health problems are just beginning to emerge. But the transmission of information can flow in both directions. Health psychologists can help reform the U.S. health care system by helping policymakers understand those things that other countries do better than we do. For example, all Canadian citizens are covered through one government-subsidized health insurance provider. Although physicians work as independent service providers in private offices and clinics, much like those in the United States, their fees are fixed through regular negotiations with the government of the province in which they practice. Thus, physicians cannot charge more for their services than the agreed-upon price.

As another example, consider one aspect of the Australian system: well-woman/well-man clinics. The aim of these clinics is to promote the health of the total woman and man, focusing on wellness rather than only on disease. These free clinics, staffed by nurse practitioners, are found throughout the country and focus on education, assessment, and nonmedicinal management of personal and family stress problems.
Conclusion

Health psychology’s outlook as a profession is bright. The field has made impressive advances in its brief history, though there is much more to learn. Future health psychologists will face many challenges as they work to improve individual and community health and to help reform the health care system. I hope that your increasing understanding of health psychology will be as motivating to you—both personally and professionally—as it has been to me.

Weigh In on Health

Respond to each question below based on what you learned in the chapter. (Tip: Use the items in “Summing Up” to take into account related biological, psychological, and social concerns.)

1. After having read this textbook, identify some ways that you think you could improve your health related to its biological, psychological, and social or cultural components.

2. Some friends of yours know that you have taken a class in health psychology. They want you to share your insight into the future of health care, especially how it will be influenced by the work of health psychologists. What will you tell them? What research did you read about that supports your thinking?

3. After finishing this course in health psychology, you decide to pursue health psychology as your career. What subfield of health psychology will you choose: teacher, research scientist, or clinician (see Chapter 1)? Identify a goal that you would hope to accomplish in your chosen career.

Summing Up

Health Psychology’s Most Important Lessons
Lesson 1: Psychological and Social Factors Interact with Biology in Health
Lesson 2: It Is Our Own Responsibility to Promote and Maintain Our Health
Lesson 3: Unhealthy Lifestyles Are Harder to Change Than to Prevent
Lesson 4: Positive Stress Appraisal and Management Are Essential to Good Health

Health Psychology’s Future Challenges
Challenge 1: To Increase the Span of Healthy Life for All People
Challenge 2: To Reduce Health Discrepancies and Increase Our Understanding of the Effects of Gender, Culture, and Socioeconomic Status on Health
Challenge 3: To Achieve Equal Access to Preventive Health Care Services for All People
Challenge 4: To Adjust the Focus of Research and Intervention to Maximize Health Promotion with Evidence-Based Approaches
Challenge 5: To Assist in Health Care Reform
Key Terms and Concepts to Remember

behavioral immunization, p. E-6
quality adjusted life years (QALYs), p. E-8
compression of morbidity, p. E-8
integrated primary care (IPC), p. E-18

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To accompany your textbook, you have access to a number of online resources, including quizzes for every chapter of the book, flashcards, critical thinking exercises, videos, and Check Your Health inventories. To access this information, go to http://www.worthpublishers.com/launchpad/healthtk.