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Impact of the Health Professional

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Health Promotion

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INTRODUCTION

The single causation theory of morbidity has been largely replaced by multifactorial causation theories and chronicity of conditions. Improved recognition and management of disease processes, better sanitation, immunizations, and other health measures have increased the longevity of Americans. The life expectancy in the early 1900s was the late forties; it has now increased to the late seventies for both genders. Diseases that once brought sudden death have been surpassed by chronic disease. Americans are living longer but not necessarily healthier. Societal influences and individual lifestyle choices have negatively influenced health. In two important research articles describing the actual causes of death (nongenetic), smoking has remained the leading cause of death in the United States for the last two decades (McGinnis & Foege, 1993; Mokdad, Marks, Stroup, & Gerberding, 2004). Poor diet, physical inactivity, alcohol consumption, microbial agents, toxic agents, motor vehicle crashes, incidents involving firearms, sexual behaviors, and illicit use of drugs follow smoking as actual causes of death. It was anticipated that poor diet and physical inactivity would soon become the leading causes of death, replacing smoking (Mokdad et al., 2004); however, the Centers for Disease Control and Prevention

(MSNBC, 2005) later stated the numbers of obesity-related deaths were alarming but not increasing by as many as previously thought (65,000 deaths per year rather than the predicted 100,000 per year), and that the obesity numbers would not overtake smoking as rapidly as first forecasted. As researchers continue to study the condition, long-term obesity has been associated with avoidable hospitalizations and substantial risk for health complications (Schafer & Ferraro, 2007). The CDC has maintained that poor diet, physical inactivity, and smoking are the major underlying causes of death. These factors and the other modifiable behavioral risk factors listed previously are believed to be the genesis of heart disease, malignant neoplasm, cerebrovascular disease, diabetes mellitus, and other chronic diseases. One half of all deaths in the United States could be attributed to a limited number of largely preventable health behaviors and exposures (Mokdad et al., 2004). The escalating healthcare costs, disease, and deaths associated with these factors make health promotion essential for all.

Defining Health Promotion in Chronic Illness

Health promotion is a multidimensional concept and focuses on maintaining or improving the health of individuals, families, and communities.

Health promotion for individuals with chronic or disabling conditions is commonly defined as efforts to create healthy lifestyles and a healthy environment to prevent secondary conditions, such as teaching people how to address their healthcare needs and increasing opportunities to participate in usual life activities. These secondary conditions can be the medical, social, emotional, mental, family, or community problems that an individual with a chronic or disabling condition likely experiences. Environmental factors that encompass healthy living include the policies, systems, social contexts, and physical surrounding that facilitate a person's participation in activities, including work, school, leisure, and community events (*Healthy People 2010*).

Health-promoting activities can be implemented at the public level or the personal level, and involve passive or active strategies (Edelman & Mandle, 2006). Passive strategies, such as those used in food industry sanitation, decrease infectious agents in foods and improve public health. National, state, and local public and private agencies are given the responsibility to provide passive strategies to promote health for their constituents. Active strategies, such as engaging in better personal nutrition or activity regimens, are dependent on the individual and/or family becoming involved (Edelman & Mandle, 2006). Although both strategies are essential, this chapter focuses primarily on active strategies for individuals with chronic illness and their families.

Health promotion applies to all individuals regardless of age or disability. The goal of health promotion is to increase the involved person's control over their health and to improve it. Leddy (2006) adds that health promotion is mobilizing strengths to enhance health, wellness, and well-being.

Health promotion in chronic illness involves behavioral change for positive lifestyle activities, accepting one's condition and making the necessary adjustments, decreasing the risk of secondary disabilities and preventing further disease, and striving for optimal health.

Health promotion in chronic illness is important in maintaining and enhancing the function of the individual. It is also critical to prevent recurrence of some conditions. Often families direct their energies toward the illness rather than health. The illness and its cascade of effects alter family dynamics, usual roles, and patterns of life (Heinzer, 1998). Managing medicines, conserving physical and mental energy, keeping appointments with healthcare professionals, adjusting finances, and learning new resources will likely require substantial effort. These new stressors often overtax the individual, and activities to maintain a healthy lifestyle are often ignored. Preventive health screening for other conditions may be forgotten by the client and healthcare professional. Yet, health-promoting behaviors are crucial in the management of chronic conditions and are often the essential aspect in successful management. Chronically ill persons may develop comorbidities that could be avoided or minimized with early detection. Disease-specific preventive care needs and related physical, social, emotional, and spiritual well-being encompass health promotion for those with and without chronic illness. McWilliam, Stewart, Brown, Desai, and Coderre (1996) found in their phenomenological study exploring health and health promotion of 13 select sample participants with chronic illness, "a dynamically changing and evolving endeavor that encompassed four components: fighting and struggling, resigning oneself, creatively balancing resources, and accepting" (p. 5).

Undoubtedly, chronic illness presents numerous challenges to health promotion. The potential for these activities and overall health remains largely untapped in many individuals with chronic illness. Creating new ways of accomplishing health promotion often remains an unfilled goal for nurses and their chronically ill clients. Efforts must go beyond the individual's chronic illness and limitations to include holistic health that focuses on personal goals, evidence-based care tailored to the person, and a willingness to adjust the plan as needed. Determining chronically ill individuals'

perceptions of their condition, their aspirations, and their available resources, and supporting their efforts to achieve health promotion is an ongoing process. Leddy (2006) emphasizes that health promotion develops the individual strengths and environmental resources to find solutions rather than focusing solely on illness repair. Chronicity presents challenges to all those involved and can take precedence over other health considerations.

Nurses are ideally suited to promote the health of all individuals and their families. The holistic, caring perspective held by nurses provides opportunities to promote strengths at a time when others may perceive only threats to health. The consequences of failure to promote health are devastating. Additional morbidity; deaths; and financial strain for individuals, families, and society weigh heavy on the healthcare system. The rising healthcare costs and an aging population compound the problem. Sustained increases in out-of-pocket healthcare spending for Medicare recipients could make health care less affordable for all but the highest-income individuals (Neuman, Cubanski, Desmond, & Rice, 2007).

ISSUES AND IMPACT

National Documents

One of the issues surrounding health promotion and disease prevention is compliance with national documents. Initiated almost 30 years ago with the publication of *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention* (1979), and subsequent publications *Healthy People: Objectives for the Nation* (1980), *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, and *Healthy People 2010*, Healthy People national documents build on one another and address select areas of health promotion with a vision for achieving improved health for all Americans. Each document was developed through a broad consultative process, made use of the best scientific knowledge available, and was designed to measure progress over time.

Healthy People 2010

Healthy People 2010 identifies a comprehensive set of 10-year health objectives focusing on disease prevention and health promotion to achieve during the first decade of the 21st century. It has two overarching goals—to increase quality and years of healthy life and to eliminate health disparities. The 28 focus areas under the two overarching goals are identified in Table 15-1. Each of the focus areas has specific goals and potential relevance for chronically ill individuals and their families.

One example of relevance for chronically ill individuals and families is Focus Area 6, Disability and Secondary Conditions. The specific goal for this focus area is to promote the health of people with disabilities, prevent secondary conditions, and eliminate disparities between people with and without disabilities in the US population. However, misconceptions are rampant, since disability status has been traditionally equated with health status and the health and well-being of people with disabilities have been addressed primarily within in a medical and long-term-care financing context. Four main misconceptions are identified from this contextual approach: (1) all people with disabilities automatically have poor health, (2) public health should focus only on preventing disabling conditions, (3) a standard definition of “disability” or “people with disabilities” is not needed for public health purposes, and (4) the environment plays no role in the disabling process. These misconceptions have led to an underemphasis of health-promotion and disease-prevention activities targeting people with disabilities and an increase in the occurrence of secondary conditions (medical, social, emotional, family, or community problems that a person with a primary disabling condition likely experiences). Challenging these misconceptions will help to clarify the health status of individuals with disabilities and address the environmental barriers that undermine their health, well-being, and participation in life activities. Health-promotion activities are relevant to all individuals with a disability, whether they are categorized by racial or ethnic group,

TABLE 15-1

Focus Areas for *Healthy People 2010*

1. Access to Quality Health Services
2. Arthritis, Osteoporosis, and Chronic Back Conditions
3. Cancer
4. Chronic Kidney Disease
5. Diabetes
6. Disability and Secondary Conditions
7. Educational and Community-Based Programs
8. Environmental Health
9. Family Planning
10. Food Safety
11. Health Communication
12. Heart Disease and Stroke
13. HIV
14. Immunization and Infectious Diseases
15. Injury and Violence Prevention
16. Maternal, Infant, and Child Health
17. Medical Product Safety
18. Mental Health and Mental Disorders
19. Nutrition and Overweight
20. Occupational Safety and Health
21. Oral Health
22. Physical Activity and Fitness
23. Public Health Infrastructure
24. Respiratory Diseases
25. Sexually Transmitted Diseases
26. Substance Abuse
27. Tobacco Use
28. Vision and Hearing

gender, and primary conditions or diagnoses. *Healthy People 2010* emphasizes that the similarities among people with disabilities are as important as or more important than the differences among clinical diagnostic groups. Developers of the document have also considered caregiver issues as well as environmental barriers. Environmental factors affect the health and well-being of individuals with disabilities in many ways. For example, weather can hamper wheelchair mobility, medical offices and equipment may not be accessible, and shelters or fitness centers may not be staffed or equipped for people with disabilities. Compliance with the Americans with Disabilities Act (ADA) would help overcome some of these barriers.

Throughout *Healthy People 2010*, the US Department of Health and Human Services (DHHS) identifies objectives, such as the previous example of Focus Area 6, to address improvements in health status, risk reduction, public and professional awareness of prevention, delivery of health services, protective measures, surveillance, and evaluation, expressed in terms of measurable targets to be achieved by the year 2010. Full achievement of the goals and objectives of *Healthy People 2010* depends on a health-care system reaching all Americans and integrating

personal health care and population-based public health. The vision of *Healthy People 2010* in healthy communities involves broad-based prevention efforts and moves beyond what happens in physicians' offices, clinics, and hospitals to environments in which a large portion of prevention occurs: to the neighborhoods, schools, workplaces, and families in which people live their daily lives.

Leading health indicators were selected to measure the health of the nation at designated time points. The 10 indicators are: (1) Physical activity, (2) Overweight and obesity, (3) Tobacco use, (4) Substance abuse, (5) Responsible sexual behavior, (6) Mental health, (7) Injury and violence, (8) Environmental quality, (9) Immunization, and (10) Access to health care. These indicators were selected on the basis of their ability to motivate action, availability of data to measure their progress, and their public health importance. *Healthy People 2010* can be accessed at <http://www.healthy-people.gov/>

Healthy People 2010 Midcourse Review

A review assessed the status of the national objectives midway through the decade, and data were

made available January 1, 2005. This midcourse review enabled the DHHS, federal agencies, and other experts across the nation to assess the data trends during the first half of the decade, considered new science and available data, and make changes to ensure that *Healthy People 2010* remains current, accurate, and relevant, while concurrently assessing emerging public health priorities. Public comments on the changes at the midcourse to the *Healthy People 2010* objectives and subobjectives were solicited in August and September 2005. The changes to the *Healthy People 2010* objectives and subobjectives included (1) establishing baselines and targets for developmental objectives, (2) changing the wording of objectives and subobjectives, (3) deleting objectives and subobjectives, (4) adding new subobjectives, and (5) revising baselines and targets. The midcourse review also reported progress on objectives with tracking data. From the 467 total objectives in *Healthy People 2010* assessed at midcourse, 281 objectives had tracking data available. From these 281 objectives, 10% met the target, 49% moved toward the target; 14% demonstrated mixed progress; 6% demonstrated no change from the baseline; and 20% moved away from the target.

In all of the 28 focus areas, some objectives were met, exceeded, or moved toward the target. In four focus areas, Cancer (Focus 3), Diabetes (Focus 5), Immunization and Infectious Disease (Focus 14), and Occupational Safety and Health (Focus 20), more than half of the objectives were met or moved toward their targets. In four other focus areas, Environmental Health (Focus 8), Health Communication (Focus 11), Public Health Infrastructure (Focus 23), and Vision and Hearing (Focus 28), the objectives could not be assessed. In Progress for Disability and Secondary Conditions (Focus 6), discussed in the previous example, thirteen objectives were evaluated: four moved toward the target; one demonstrated mixed progress; two moved away from target; and six could not be assessed.

The overarching goal to increase quality and years of healthy life was assessed, and the

conclusion was that life expectancy had continued to improve; however, the United States has need for improvement when compared with the rest of the world. Life expectancy for both men and women had increased by about 0.5%. Measuring quality of healthy life was a difficult assessment and resulted in mixed results. It was concluded that clear conclusions for trends in healthy life expectancy could not be reached until data for future years were analyzed. However, some trends were reported. Women can expect to spend 12% of their lives in fair or poor health, 16% with activity limitation, and 39% with one or more chronic diseases. Predictions for men are better, with 10% of their lives in fair to poor health, 15% with activity limitation, and 37% with one or more chronic diseases. It is expected that black Americans will spend a greater proportion of their lives in unhealthy life states compared with whites. It was reported that the black population at birth will spend 15% of their lives in fair or poor health, 18% with activity limitation, and 42% with one or more chronic diseases. Therefore, life expectancy is slightly improving; however, the number of years in unhealthy status is increasing.

Other challenges exist in measuring quality and years of healthy life such as the populations of institutionalized, homeless, and others for whom data are not readily collected. Many of these individuals are likely to have chronic illness and experience overall poor health.

The second overarching goal—to eliminate health disparities that occur by race and ethnicity, gender, education, income, geographic location, disability status, or sexual orientation—was assessed during the midcourse. Disparities between populations were evident for many of the *Healthy People 2010* objectives. There were very few reductions in disparity among populations by education level, income, geographic location, and disability status. Lack of data also existed for population groups such as American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islanders.

Overall, it was emphasized that continued commitment to implementing effective disease prevention and health promotion interventions are essential in increasing quality and years of healthy life. The nation must measure the complex interactions of health, disease, disability, and early death. In addition, it may be more difficult to implement effective health-promotion and disease-prevention programs in some populations. These disparities will need to be further addressed to facilitate progress toward the 2010 goal (*Healthy People 2010 Midcourse Review*).

HealthierUS and Steps to a HealthierUS

Another federal initiative, *HealthierUS*, and *Healthy People 2010* share the overarching goal of helping people live longer and healthier lives. *HealthierUS* aims to achieve this goal through four basic components called pillars. The pillars are “physical fitness,” “nutrition,” “prevention,” and “make healthy choices.” *HealthierUS* emphasizes that regular physical activity is important for overall health and well-being. People are encouraged to include activities that they enjoy and easily fit into their daily routine such as walking or gardening. Physical activity for 30–60 minutes on most days can help build strength and fitness, relax and reduce stress, gain more energy, and improve sleep. These benefits contribute to decreasing the risk of heart disease and other conditions, such as colon cancer, diabetes, osteoporosis, and high blood pressure. Resources are available through the CDC to accommodate all individuals, such as physical activity for older adults with chronic illnesses http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/older_adults.htm

People who have been inactive for several years or who are currently receiving medical care, need to consult their healthcare professional before starting a new exercise program.

The second pillar, Nutrition, emphasizes the importance of a healthy diet and eating in moderation. Web sites such as <http://www.health.gov/dietaryguidelines/dga2005/recommendations.htm>

provide helpful nutrition information for the general population. The CDC provides another site <http://www.fruitsandveggiesmatter.gov/> to assist people in selecting fruits and vegetables and the US Department of Agriculture, Center of Nutrition Policy and Promotion provides their online MyPyramid Tracker <http://www.mypyramidtracker.gov/> as a dietary and physical activity assessment tool that provides information on diet quality, physical activity status, related nutrition messages, and links to nutrient and physical activity information. *HealthierUS* acknowledges that better nutrition can reduce risk for diseases like heart disease, certain cancers, diabetes, stroke, and osteoporosis.

Although *Healthy People 2010* broadly addresses the *HealthierUS* prevention pillar, it is explicitly addressed by a number of objectives within the *Healthy People 2010* focus areas that highlight preventive screenings. *HealthierUS* prevention pillar also encourages all people to learn how to prevent disease and improve their quality of life. The *Healthier US* Web site provides information and recommends that people know their family history and how genes and personal history could put their health at risk.

A variety of screening recommendations are provided from reputable sources such as the American Heart Association, the CDC, National Cancer Institute, National Heart Lung and Blood Institute, and the DHHS Agency for Healthcare Research and Quality (AHRQ). People can review the recommendations and share their history information with their healthcare professionals to determine what tests and screenings are appropriate for them. The make healthy choices pillar is also addressed in several *Healthy People 2010* focus areas, including Tobacco Use, Injury and Violence Prevention, and Substance Abuse. The *HealthierUS* Web site reminds people when faced with choices that may impact their health and the lives of those they love, it is important to remember that there are options and resources to help them make healthy decisions. Related Web sites such as that for the US Food and Drug Administration (FDA) provide

information for people to make better informed decisions, for example, in taking medications www.fda.gov/usemedicinesafely, and the Surgeon General in protecting yourself from second hand tobacco smoke www.surgeongeneral.gov/library/secondhandsmoke/factsheets/factsheet3.html

More information about *HealthierUS* is available at www.healthierus.gov.

Steps to a HealthierUS supports evidence-based community programs and interventions focused on reducing the burden of chronic diseases, including diabetes, obesity, and asthma, and related risk behaviors throughout the nation. Like *Healthy People 2010*, this initiative aims to help people live longer and healthier lives. It also links to *Healthy People 2010* directly through DATA2010 (an interactive database system), by explicitly using Healthy People objectives to assess progress. Programs under *Steps to a HealthierUS* work together to guide states and communities throughout the nation toward improving health status. More information is available at www.healthierus.gov/steps

500-Day Plan and Priority Activities

The Department of Health and Human Services Secretary Mike Leavitt's *500-Day Plan* and *Priority Activities* are management tools on the agency's primary areas of focus. One of the primary areas is prevention. The prevention priority recognizes that the risk of many diseases and health conditions is reduced through preventive actions, and that a culture of wellness deters or diminishes debilitating and costly health events. The prevention priority does, therefore, build on DHHS prevention policy and programs that are based on the best available evidence on how to prevent or mitigate chronic disease through promotion of healthy lifestyle choices, medical screenings, and avoidance of risky behaviors. *Healthy People 2010* objectives and subobjectives serve as a means of measuring progress in achieving the Secretary's prevention priority. The *500-Day Plan*, *Priority Activities*, and *250-Day Update* are located at <http://www.hhs.gov/secretary/>

The following guides are other national documents that serve as recommendations for screening and other preventive health care.

Guide to Clinical Preventive Services

The *Guide to Clinical Preventive Services* includes the US Preventive Services Task Force (USPSTF) recommendations on screening, counseling, and preventive medication topics, as well as clinical considerations for each topic. Sponsored since 1998 by the AHRQ, the USPSTF is an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. The task force rigorously evaluates clinical research to assess the merits of preventive measures. The clinical categories are cancer; heart and vascular disease; injury and violence; infectious diseases; mental health conditions and substance abuse; metabolic, nutrition, and endocrine conditions; musculoskeletal conditions; obstetrics and gynecologic conditions; pediatric disorders; and vision and hearing disorders. More information is available at www.ahrq.gov/clinic/cps3dix.htm.

Guide to Community Preventive Services

The *Guide to Community Preventive Services* serves as a filter for scientific literature on specific health problems that have a large-scale impact on groups of people who share a common community setting. This guide summarizes what is known about the effectiveness, economic efficiency, and feasibility of interventions to promote community health and prevent disease. The Task Force on Community Preventive Services, an independent decision-making body convened by DHHS, makes recommendations for the use of various interventions based on the evidence gathered in rigorous and systematic scientific reviews of published studies conducted by review teams for the guide. The findings from the reviews are published in peer-reviewed journals and also are made

available online. The task force has published more than 100 findings across 16 topic areas, including tobacco use, physical activity, cancer, oral health, diabetes, motor vehicle occupant injury, vaccine-preventable diseases, prevention of injuries due to violence, and social environment. More information is available at www.thecommunityguide.org.

Challenges

These national documents illustrate that health promotion and disease prevention are essential for all Americans. The nation needs to continually work toward the goals; however, to do so will require changes in the healthcare system. Providing chronic health care once the disease has occurred is only a segment of the needed care. Many of the risks to health—obesity, diabetes, hypertension, heart disease, cancer, and other chronic conditions—often result from failure to prevent their occurrence. More closely articulated preventive, public health, and policy programs are needed to promote a healthy life. Other factors, including genetics and environmental risks, contribute to chronic illness.

Health promotion can and should occur before the onset of chronic illness, and as early as possible. Health promotion ideally occurs throughout one's life and in concert with chronic conditions

through the end of life. Health promotion is a lifetime activity and can include end-of-life planning for individuals and their significant others. Preparing for the physical, psychosocial changes that accompany death requires attention before crisis events. Preparation, dissemination, and discussion of advance directives with significant others can help set clear boundaries for honoring the wishes of clients (Rainer & McMurry, 2002).

Barriers

Reported barriers to health screening and other preventive care must be addressed. Unhealthy behaviors continue to increase in the United States, putting people more at risk for initial chronic illness, deters health promotion practices among those with chronic illnesses. The CDC (2007b) reports that more than 50% of US adults do not get enough exercise to receive health benefits, and 25% are not active at all in their leisure time. In 2005, only 23% of US adults and 20% of young people ate five or more fruits and vegetables each day. Cigarette smoking is responsible for about 440,000 deaths in the United States each year. More deaths are caused each year by tobacco use than by all deaths from HIV/AIDS, alcohol use, motor vehicle injuries, suicide, and murder combined. Exercising regularly, eating a healthy diet,

CASE STUDY

L.K. is a 40-year-old woman with type 2 diabetes who lives with her husband of 15 years. Both have been diagnosed as overweight and have elevated blood lipid levels and blood pressure. L.K.'s last hemoglobin A1C was 8.2. She reports that she likes fast, convenient foods, and they both enjoy watching television in the evenings. Neither has a physical exercise regimen. Both speak and write English and dropped out of high school in the 10th grade. L.K. hates to read health information because she thinks it is too complicated. Both L.K. and her husband

work outside the home at sedentary jobs. L.K. does not know why she has diabetes, since no one else in her family has it.

Discussion Questions

1. What are two health literacy implications of the preceding case?
2. How would you tailor a health-promotion program for L.K.?
3. What theoretical framework would be useful for the health-promotion program?

and not using tobacco can help people prevent and manage chronic diseases. However, many people in the United States do not have easy access to healthy foods and safe, convenient places to exercise. These barriers have led to increasingly sedentary lifestyles for the majority of Americans.

Other barriers exist for health screening. Kelly et al. (2007) identified fear and embarrassment as commonly cited client barriers to screening for colorectal cancer. Less than 44% of their study population of Appalachians in the state of Kentucky underwent colorectal cancer screening consistent with guidelines. These researchers identified establishing trust and educating clients, use of resources like educational materials, and finding inexpensive and easy ways to screen as the most productive way to overcome the barriers.

Little is known about how health screening and other preventive care affects outcomes. Norman, Potashnik, Galantino, DeMichele, House, and Localio (2007) emphasized that we do not know what survivors of diseases like breast cancer must do to prevent recurrence. Data are needed on lifestyle change from prediagnosis to postdiagnosis, changes over time after diagnosis, and identification of potential lifestyle risk factors.

Health promotion has not been addressed well in the care of clients with numerous chronic health conditions. Capella-McDonnall (2007) reported that despite the recent focus on health promotion for persons with disabilities, adults who are visually impaired have not received adequate attention. Two conditions, being overweight or obese and not being physically active, are problems for many persons with disabilities including those who are visually impaired.

Problems with health literacy are commonplace in our society. Health literacy is the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (US Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2007). Nine of 10 adults may lack the skills needed to manage their health and disease prevention. Poor health outcomes and

less frequent use of preventive services are linked with low literacy. Individuals with low literacy are more likely to skip important preventive screening such as colonoscopy, Pap smears, and mammograms, and are less likely to receive protective measures such as flu immunizations. Persons with low literacy are more likely to have chronic illness and are less able to manage effectively. More preventable hospitalizations and use of emergency services are found among clients with chronic illness with limited literacy skills. People with limited literacy skills often lack knowledge about the nature and causes of disease and may not understand the relationship between lifestyle factors such as smoking, lack of exercise and inadequate nutrition, and poor health outcomes.

Other barriers to health screening and preventive care include associated costs; lack of knowledge/understanding; negative beliefs/attitudes; lack of access, especially for those with limited geographical and/or functional ability; and other factors addressed in the models/theories/frameworks discussed in the following.

Models/Theories/Frameworks

An entire body of literature has evolved around the models/theories relating to health behavior change. Considerable research has demonstrated success in changing behavior with smoking cessation, alcohol abuse, and others using these theories. The following examples are theories/models that may be useful in assessing change within chronic illness.

The Transtheoretical Model (TTM) by Prochaska, Redding and Evers (2002) incorporates the processes and principles of change from several major theories in psychotherapy and human behavior. The stages of change within the model include (1) precontemplation (no intention to change in the foreseeable future); (2) contemplation (intention to change in the next 6 months); (3) preparation (intention to take action within the next 30 days and some behavioral steps to change); (4) action (has changed behavior for less than 6 months;

and (5) maintenance (has changed behavior for more than 6 months). These stages represent a temporal dimension to change and are helpful in identifying timing of change interventions. A last stage, (6) termination (individual who possesses total self efficacy is no longer susceptible to temptation of unhealthy behavior), is rarely used, since few individuals reach this level. In the TTM Model, individuals weigh the pros and cons of changing (decisional balance) and determine their confidence (self efficacy) that they can cope with high-risk situations without relapsing to unhealthy or high-risk behavior specific to the situation.

The ten processes of change of the TTM Model are activities that people use to progress through the stages of change. They include (1) consciousness raising (increasing awareness of the behavior); (2) dramatic relief (experiencing increased emotions followed by reduced affect if appropriate action is taken); (3) self-reevaluation (assessing one's image with and without the unhealthy behavior); (4) environmental reevaluation (assessing how one's social environment is affected by the unhealthy behavior); (5) self-liberation (believing and committing to change); (6) helping relationships (building support for healthy behavior change); (7) counterconditioning (learning that healthy behaviors can replace unhealthy behaviors); (8) contingency management (increasing reinforcement and probability that healthy behaviors will be repeated); (9) stimulus control (removing unhealthy behavior cues and adds healthy behavior cues); and (10) social liberation (increasing social opportunities to foster behavior change) (pp. 103–104). The TTM Model has been used in numerous studies including those involving smoking cessation, mammography screening, alcohol avoidance, exercise and stress management, and others. The TTM Model has been beneficial in tailoring interventions for the most appropriate stage of change.

Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) offer another framework for examining factors that determine behavioral change. The framework focuses on motivational factors as determinants of the

person's likelihood of performing a specific behavior. The TRA provides the rationale that the person's beliefs and values determine if the person intends to change behavior. The TPB adds that perceived behavioral control of facilitating or constraining conditions will affect intention and behavior. Beliefs affecting behavior differ widely among persons, groups, and even specific behaviors of the same individual. Use of the models is helpful in understanding the likelihood of people performing a specific healthier behavior and can provide a framework for interventions. These theories can be applied along with others to design and deliver behavioral change to improve research and practice (Montano & Kasprzyk, 2002).

The Health Belief Model (HBM) has been one of the most widely used conceptual frameworks to explain change in health behavior and to provide a framework for interventions (Janz, Champion, & Strecher, 2002). The components of the HBM have been revised many times since its inception in the 1950s. Once a model to explain readiness to obtain chest X ray screening for tuberculosis, the model has evolved beyond screening behaviors to include preventive actions, illness behaviors, and sick-role behavior. The HBM Model now purports that individuals will take action to prevent, to screen for, or control ill-health conditions if there is Perceived Susceptibility (persons regard themselves as susceptible to the condition), if there is Perceived Severity (persons believe it would have potentially serious consequences), if there is Perceived Benefits (persons believe that a course of action available to them would be beneficial in reducing either their susceptibility to or the severity of the condition), and if the Perceived Barriers can be overcome [persons believe that the anticipated barriers to (or costs of) taking the action are outweighed by its benefits (Janz et al., 2002)]. Determining strategies to activate persons' readiness to change (Cues to action) can include providing information, and awareness campaigns. Like TTM, self efficacy is an integral concept of the HBM. Researchers have tested interventions to increase positive change for each concept.

The Health Promotion Model (HPM) integrates constructs from the Expectancy-Value Theory and Social-Cognitive Theory and provides a nursing perspective to depict the multidimensional nature of persons pursuing health (Pender, Murdaugh, & Parsons, 2002). The HPM purports that behavior change will occur if there is positive personal value and a desired outcome. The HPM has been revised since its initial development in the early 1980s and is considered an approach-oriented or competence model. The authors report that the HPM is different than the HBM discussed earlier, as it eliminates the negative source of motivation, fear or threat, from major motivating sources for health behavior change. The authors emphasize that elimination of the personal threat motivational factor provides applicability of the model across the lifespan. Self efficacy is a major construct of HPM, and assumptions of the model require an active role of the person “in shaping and maintaining health behaviors and in modifying the environmental context for health behaviors” (Pender et al., 2002, p. 63). The HPM has been a framework for studies predicting its general health promoting abilities and for specific health behaviors including hearing protection, exercise, and nutrition (Pender et al., 2002).

INTERVENTIONS

Chronic diseases account for 70% of the 1.7 million deaths that occur in the United States each year. These diseases also cause major limitations in daily living for almost 1 of 10 Americans or about 25 million people. Although chronic diseases are among the most common and costly health problems, they are also among the most preventable. Adopting healthy behaviors such as eating nutritious foods, being physically active, and avoiding tobacco use can prevent or control the devastating effects of these diseases (CDC, National Center for Chronic Disease Prevention and Health Promotion, 2007). “Nurses have been leaders in health promotion since the time of Florence Nightingale, whose pioneering work with the use

of statistics demonstrated the positive effect of improved sanitation on the health of injured soldiers. Nurses have also led the healthcare profession in recognizing that health is a state of physical and mental wellness and that it is impossible to separate the former from the latter” (Calloway, 2006, p. 105). Olshansky (2007), editor of the *Journal of Professional Nursing*, emphasizes that nurses are the most appropriate health professionals to address health promotion. Nursing has role models within our profession such as Nola Pender who developed the HPM described previously. Nursing literature abounds with textbooks, articles, and other publications that include nursing’s role in health promotion to individuals, families, communities, and populations. Yet, nurses cannot assume sameness for chronically ill persons, and nurses cannot assume resources are equally available to all. People with chronic illness view health differently and will have different goals defined within their limits of their disability.

Selected Examples

A review of the literature provides examples of health promotion interventions for clients with chronic illness. The following discussion illustrates that much is yet to be examined. In an international study, Huang, Chou, Lin, and Chao (2007) analyzed survey data including the Health-Promoting Lifestyle Profile and quality of life data of 129 outpatients from a medical center who had systemic lupus erythematosus. These researchers found that a health-promoting lifestyle could not enhance the physical component summary of quality of life directly without an improvement in the fatigue disability, but a health-promoting lifestyle had a significant effect on the mental component summary of quality of life. This illustrates that although the physical aspects of the chronic condition may not improve without other physical changes, there can be improvements in psychological health.

Siarkowski (1999) emphasized the importance of including health promotion and illness

management when working with insulin-dependent diabetes mellitus in children and their families. Siarkowski's reviewed existing research and revealed factors that put children and their families at risk for poor adaptation. Health promotion is critical to minimize these risks.

Hope has been recommended as a health-promoting force. Hollis, Massey, and Jevne (2007) identified hope-enhancing strategies and sources to improve one's health. Blue (2007) studied 106 adults at risk for diabetes and found the theory of planned behavior to be useful in explaining their healthy eating intentions and physical activity.

Motivational Interviewing

Motivational interviewing incorporates behavior change principles to promote healthy activities. Brodie and Inoue (2005) demonstrated the effectiveness of motivational interviewing over a traditional exercise program in increasing reported physical activity in older adults with chronic heart failure. Jackson, Asimakopoulou, and Scammell (2007) demonstrated in an experimental study of 34 clients with type 2 diabetes that motivational interviewing and behavior change training significantly increased the participants' physical activity and stage of change.

Motivating Factors

In a review of 26 studies (8 randomized controlled trials and 18 observational), use of pedometers have significantly increased physical activity and significantly decreased body mass index and blood pressure (Bravata et al., 2007). The use of pedometers as a motivating factor with chronically ill persons capable of using a pedometer and the long-term effect of pedometers are yet to be investigated. Motivating factors have been identified in theories/models/frameworks, and positive motivators such as those in the HPM are congruent with nursing philosophical bases. Challenges for the future are to continue the testing and use of such

frameworks in the health-promoting activities of persons and families with chronic illness.

Health Coaching

Health coaching is emerging as a new approach for preventing exacerbations of chronic illness and supporting lifestyle changes. This method partners with clients to enhance self-management strategies. It is being piloted by Medicare for clients with congestive heart failure and diabetes (Huffman, 2007). Holland, Greenberg, Tidwell, and Newcomer (2003) described the success of the California Public Employees Retirement System (CalPERS) Health Matters program using a community-based health coaching program operating in Sacramento. Criteria for eligibility included one or more qualifying chronic health condition, being 65 or older, and other program criteria. The program uses a menu of disability-prevention strategies, with health coaching, patient education on the self-management of chronic illness, and fitness. The program helps link participants to existing community, health plan, and self-directed programs. It encourages their participation in the programs developed for the project.

Mass Media Campaigns

Beaudoin, Fernandez, Wall, and Farley (2007) used a mass media campaign of high-frequency paid television and radio advertising, as well as bus and streetcar signage to promote walking and fruit/vegetable consumption in a low-income, predominantly African American urban population in New Orleans. These researchers found over 5 months of the campaign, a significant increase in message recall measures, positive attitudes toward walking and toward fruit/vegetable consumption. It is unknown how many persons with chronic illness were included. It is likely many persons were at risk for future chronic illness. These efforts demonstrate population efforts to improve health that may be researched with chronic illness populations.

Snyder (2007) reviewed existing meta-analyses for effectiveness of health communication campaigns, and found that the average health campaign affects the intervention community by about five percentage points. Snyder concluded that successful campaigns that are likely to change nutrition behaviors need to include specific behavioral goals for the intervention, identification of the target population, communication activities and channels that will be used, provision of message content and presentation, and provision of techniques for feedback and evaluation.

Web-Based Programs

Verheijden, Jans, Hildebrandt, and Hopman-Rock (2007) found that Web-based behavioral programs often reach those who need them the least. However, obese people were more likely to participate in follow-up than people of normal body weight. The researchers proposed that the Web-based programs are a nonstigmatizing way of addressing the problem and suggested that weight management is better suited for this delivery method than many other health-related areas. Although this study was based in The Netherlands, it provides a source of potential research for other countries with similar health-promotion problems.

Contracts

Burkhart, Rayens, Oakley, Abshire, and Zhang (2007) found in their randomized, controlled trial of 77 children with persistent asthma that the intervention group who received asthma education plus contingency management, including a contingency contract, tailoring, cueing, and reinforcement, significantly increased adherence to asthma self-management over the control group who received asthma education without the contingency management.

However, in 30 trials involving 4691 participants, Cochrane authors concluded that there is limited evidence that contracts can improve patients' adherence to health-promotion programs.

Large, well-controlled studies are needed to recommend contracts in preventive health programs (Bosch-Capblanch, Abba, Prictor, & Garner, 2007).

Health Literacy

Improving the use of health information is paramount in health-promotion programs. The DHHS, Office of Disease Prevention and Health Promotion (2007) provides a summary of the best practices for healthcare professionals to improve health literacy through providing effective communications and health services that are usable. Table 15-2 outlines these practices.

Nath (2007) reviewed the literature between 1990 and mid-2006 for overcoming inadequate literacy in diabetes self-management and other chronic illnesses. The importance of culturally appropriate health literacy, improvement in self-efficacy, improved communication, and quality computer-assisted instruction were discussed as essential elements in tailoring health education. Nurses were recommended to address barriers related to inadequate literacy by increasing sensitivity to the problem, developing literacy-assessment protocol, creating and evaluating materials for target populations, providing clear communication, including health literacy in nursing curricula, fostering decision making with patients, and conducting research about literacy.

Additional Studies

Using telehealth to improve access, students in a community setting applied self-efficacy theory to help low-income older adults with chronic health problems to increase their practices of health promotion (Coyle, Duffy, & Martin, 2007). Although faculty and students favorably evaluated the activity, measurement of patient outcomes was not conducted. Like Web-based programs, the effects of telehealth require further research.

Program design of health-promotion programs can significantly influence the participation

TABLE 15-2

Improving Health Literacy Interventions

<p>When providing health information, is the information appropriate for the user?</p>	<p>Identify intended users of the information and services. Evaluate the users' knowledge prior to, during, and after the introduction of information and services. Acknowledge cultural differences and practice respect.</p>
<p>When providing health information, is the information easy to use?</p>	<p>Limit the number of messages. Keep it simple and, in general, limit the information to no more than four main messages. Use plain language. Use familiar language and an active voice. Avoid jargon. See www.plainlanguage.gov for more information. Focus on the behavior that you want the person to change Supplement instructions with visuals to help convey your message. Make written communication look easy to read by using large font and use of headings and bullets to break up text; limit line length to between 40 and 50 characters. Improve Internet information by using uniform navigation, organizing information to minimize searching and scrolling, including interactive features. Apply user-centered design principles and conduct usability testing.</p>
<p>When providing health information, are you speaking clearly and listening carefully?</p>	<p>Ask open-ended questions. Use a medically trained interpreter for those who do not speak English or have limited ability to speak or understand English. Use words and examples that make the information relevant to the person's cultural norms and values. Check for understanding using a "teach-back" method to enhance communication.</p>
<p>Improve the use of health services.</p>	<p>Improve usability of health forms and instructions including plain language forms in multiple languages. Improve the accessibility of the physical environment including universal symbols, clear signage, and easy flow through healthcare facilities. Establish a patient navigator program of individuals who can help patients access services and appropriate healthcare information.</p>
<p>Build knowledge to improve health decision-making.</p>	<p>Improve access to accurate and appropriate health information. Increase self-efficacy and facilitate health decision making. Partner with educators to improve health curricula.</p>
<p>Advocate for health literacy in your organization.</p>	<p>Make the case for health literacy improvement. Identify how low health literacy affects programs. Incorporate health literacy into mission and planning. Establish accountability by including health literacy improvement in program evaluation.</p>

of all individuals. Warren-Findlow, Prohaska, and Freedman (2003) demonstrated factors that influenced participation and retention in an exercise intervention study targeted to African American and white older adults with multiple chronic illnesses. These researchers found that eligible participants who did not enroll were more likely to be diabetic and younger than age 60. Seventy percent of the enrolled participants remained in the program after one year. The attrition was related to program site, functional status, and having a high school degree. Attrition was not associated with chronic illness. The researchers concluded that group-specific efforts tailored for the group can be successful in recruiting and retaining participants.

Feldman and Tegart (2003) explored older African American women with arthritis and their motivations and struggles with health promotion. These reflections provide helpful suggestions as nurses develop health promotion programs for clients with chronic illness.

Lindsey (1996) used a phenomenological approach to study health in eight participants living with a variety of different chronic conditions. Lindsey uncovered themes that reflected the adjustment made by participants in a positive way. She suggests transforming nursing care from a problem and deficit focus to a focus on the client's capacity and promotion of health and healing.

Miller and Iris (2002) found that socialization and social support were central to the participation of older adults with chronic illness who participated in a wellness program. In this study, participants recognized that chronic disease did not prohibit living a healthy lifestyle. The White Crane Model of Healthy Lives for Older Adults used in this study contributed to understanding the way older adults view health for themselves. This model is also thought to be helpful in developing program evaluation measures.

A diet and exercise program to reduce cardiovascular disease risk was used with employees regardless of presence of chronic illness. There were significant differences between pre- and post-

intervention for lipid profiles and weight. Self-reported levels of participation in the diet were significantly related to improvement in the low-density lipoprotein (LDL) levels (White & Jacques, 2007).

The addition of health promotion to the usual care of frail older home care clients was studied in Canada by Markle-Reid, Weir, Browne, Roberts, Gafni, and Henderson (2006). These researchers found that proactively providing health promotion to older adults with chronic health needs enhanced quality of life but did not increase the overall costs of health care. Better mental health functioning, reduction in depression, and enhanced perceptions of social support were reported in the experimental group. The researchers concluded that their finding underscored the need to provide health promotion for older clients receiving home care.

Many areas remain for further research to measure the effect of health promoting frameworks and interventions with individuals/families with chronic illness. The earlier discussion provides a sampling of the current literature.

Guidelines

There are numerous easily accessible guidelines for health promotion, health screening, and preventive care at the following Web site www.guidelines.gov and other sources. Examples of guidelines are discussed in the following.

Immunizations are one of the most important discoveries in human history. Vaccines have helped save millions of lives worldwide and millions of dollars each year in unnecessary health-care expenditures [Infectious Diseases Society of America (IDSA), 2007]. However, there are unacceptably low rates of coverage among adults and children in the United States. The influenza vaccine alone can save thousands of lives by providing protection for persons with chronic illness. Immunized healthcare providers can decrease transmission of influenza to chronically ill persons. Recommended immunization schedules and information are easily obtained from the CDC.

Several organizations provide guidelines that include health promotion for chronic conditions. Self-management education programs such as the diabetes self-management education (DSME) are outlined in the diabetes national standards (Kulkarni, 2006). Nurses are encouraged to use evidence-based guidelines as they practice.

OUTCOMES

The desired outcome for chronically ill individuals and their families is to maintain and improve their overall health. Health promotion activities should

target the major causes of death—tobacco use, poor diet, physical inactivity, alcohol consumption, microbial agents, toxic agents, motor vehicle crashes, incidents involving firearms, sexual behaviors, and illicit use of drugs. These causes are responsible for the majority of deaths in the United States. Measures are needed to research outcomes of health-promoting interventions across populations and disabilities. Further efforts to make activities accessible and studies to evaluate their effectiveness are encouraged. The challenge of the coming years will be to link existing and future research studies to practice.

EVIDENCE-BASED PRACTICE BOX

A shift from preventive home care nursing functions to acute inpatient care functions has resulted in fragmented, expensive care for older adults with chronic illness, rather than comprehensive and proactive care that is more likely to improve health outcomes. Providing the most appropriate services to older adults was the impetus for this study.

A two-armed, single-blind, randomized controlled trial of 288 older frail adults with chronic health needs, aged 75 and older, were evaluated in a Canadian study (Markle-Reid et al., 2006). The model of vulnerability by Rogers (1997) provided the theoretical basis for the study. Participants were randomly assigned to the usual home care or a “proactive” nursing health-promotion intervention that included a health assessment combined with regular home visits or telephone contacts, health education about management of illness, coordination of community services, and use of empowerment strategies to enhance independence. Of the 288 patients randomly assigned at baseline, 242 completed the study (120 with the proactive nursing intervention, 122 in the control group). Results demonstrated that proactively providing the intervention group with nursing health promotion significantly resulted in better mental health functioning ($P = 0.009$), a reduction in depression ($P = 0.009$), and enhanced perceptions of social support ($P = 0.009$), while not increasing the overall costs of health care. Findings supported the need to provide nursing services for health promotion for older patients receiving home care. Implications from this study support that health-promotion efforts are productive in improving health outcomes and can be cost-effective.

Numerous free resources are available through the federal government and other organizations. Many have been described throughout this chapter. Nurses are instrumental in promoting health. Stemming from our earliest work, nurses recognize the importance of health promotion. Like Canada and other countries, health promotion and disease prevention is paramount in our costly, fragmented US healthcare system.

Source: Markle-Reid, M., Weir, R., Browne, G., Roberts, J., Gafni, A., & Henderson, S. (2006). Health promotion for frail older home care clients. *Journal of Advanced Nursing*, 54(3), 381–395.

STUDY QUESTIONS

1. Describe the importance of health promotion in chronic illness.
2. Name the three major actual causes of death in the United States.
3. What is the goal of health promotion?
4. Identify a theory/model framework useful in working with chronically ill individuals who need to change an unhealthy behavior.
5. Discuss national documents that address health promotion and disease prevention.
6. What interventions can nurses use to promote health in persons with chronic illness?

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