

one

chapter one

The Basics of Wellness

*Health is a state of complete physical, mental and social well-being;
and not merely the absence of disease or infirmity.*



World Health Organization (1947, 2009)

OBJECTIVES

Upon the completion of this chapter, you should be able to:

1. Define the terms *health*, *health promotion*, *prevention*, and *wellness*.
2. Discuss the impact of the World Health Organization's definition of health as it applies to wellness.
3. Discuss the Healthy People initiative, particularly *Healthy People 2010*.
4. Compare the definitions of health and wellness.
5. Critique the definitions of wellness.
6. Differentiate between primary prevention, secondary prevention, and tertiary prevention.
7. Discuss the concept of the triad of wellness and list its components.
8. Differentiate between the six models of wellness.
9. Discuss the dimensions and sub-dimensions of the humanistic model of wellness.

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10. Provide a rationale for the secondary dimension of the humanistic model of wellness and determine if it is best classified as a component of the physical, mental, or social aspects of the definition of wellness.
11. Discuss the stages of wellness and apply them to yourself and others.
12. Differentiate between a lapse and relapse as well as maintenance and permanent maintenance. Apply these definitions to yourself and others.
13. Given a scenario, identify and provide a rationale for the stage of wellness in an evaluation of a patient/client.
14. Compare the use of surveys and direct examination as methods to assess wellness.

SECTION 1: HEALTH AND WELLNESS

Health

In its constitution, the World Health Organization (WHO) defines health as “Not merely the absence of disease . . . a state of complete physical, mental and social well-being” (1947, p. 7; 2009, para. 2). Thus, the WHO views health as a triad of the physical, the mental, and the social states of being. It is logical to apply the concept of health as a triad when assessing wellness and health models, if not also medical models (**Figure 1-1**).

Health Promotion

“Health promotion is the science and art of helping people change their lifestyle to move toward a state of optimal health. Optimal health is defined as a balance of physical, emotional, social, spiritual, and intellectual health. Lifestyle change can be facilitated through a combination of efforts to enhance awareness, change behavior and create environments that support good health practices. Of the three, supportive environments will probably have the greatest impact in producing lasting change” (O’Donnell, 1986, p.1). According to the “Health Promotion” Web page of the Centers for Disease Control and Prevention (CDC), “Adopting healthy behaviors such as eating nutritious foods, being physically active, and avoiding tobacco can prevent or control the devastating effects of many diseases. The CDC is committed to programs that reduce the health and economic consequences of the leading causes of death and disability and ensure a long, productive, healthy life for all people” (2009a, para. 1).

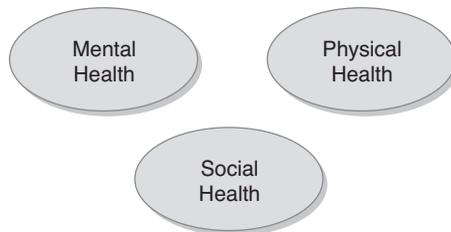


Figure 1-1 The World Health Organization’s Triad of Health

Health promotion can be described simply as purposeful activities designed to enhance the health of oneself and/or others.

Wellness

Countless definitions of wellness exist. Halbert Dunn (1896–1975), considered by many as the “founding parent of wellness,” defined it as “An integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable, within the environment in which [she or] he is functioning” (1961, p. 4). Dunn served as a public health physician and was the first nationally recognized U.S. medical doctor to explore the concept of wellness.

A current leader in the arena of wellness is Don Ardell (1938–), PhD. Ardell, who wrote the first mass-market wellness book entitled *High Level Wellness*, offered several definitions of wellness. In 1985, he stated that wellness is a “dynamic or ever-changing, fluctuating state of being” (p. 5). In 1986, Ardell added that wellness is “giving care to the physical self, using the mind constructively, channeling stress energies positively, expressing emotions effectively, becoming creatively involved with others, and staying in touch with the environment.” In 1999, Ardell stated that “Wellness is about perspective, about balance and about the big picture. It is a lifestyle and a personalized approach to living your life in such a way that you enjoy maximum freedom, including freedom from illness/disability and premature death to the extent possible, and freedom to experience life, liberty and the pursuit of happiness. It is a declaration of independence for becoming the best kind of person that your potentials, circumstances and fate will allow” (p. 1).

The American Physical Therapy Association (APTA), in its *Guide to Physical Therapist Practice*, defined wellness as the “concepts that embrace positive health behaviors that promote a state of physical and mental balance and fitness” (2001b, p. 691). Because this definition excludes the social realm of the wellness triad, I consider it narrow in scope and therefore flawed.

A number of physical therapists who possess an expertise in wellness have provided more comprehensive definitions of wellness. For example, Janet Bezner, who currently serves as the APTA’s Senior Vice President of Education, proposed that, “wellness is an individualistic concept that is multidimensional and more than just physical health habits Wellness is about positive health actions Said best, wellness is a lifestyle process that never ends” (personal communication, September 22, 2004). This description of wellness is strong in several aspects. Most importantly, it recognizes and emphasizes that wellness is individualistic, multidimensional, and dynamic in nature.

As many regard me as an expert in the field of wellness as it relates to physical therapy, the following is my definition of wellness: “A lifestyle that promotes physical, mental, and social health in the cognitive, psychomotor, and affective domains, both internally and externally” (Fair, 2000b). This definition is based upon the following terminology and concepts:

- Lifestyle: Wellness is a process (Ardell, 1986b; Dunn, 1961; Jonas, 2000)
- Physical, mental, and social health: “a state of complete physical, mental and social well-being” (WHO, 1947, p. 29; 2009, para. 2)

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- Cognitive: Knowledge or mental skills (Bloom, 1956, 1984) (i.e., knowledge about wellness as demonstrated by words and or actions)
- Psychomotor: Physical actions or skills (Simpson, 1972) (i.e., wellness-related behaviors and practices)
- Affective: Feelings (Krathwohl, Bloom, & Bertram, 1973) (i.e., the commitment to a lifestyle that promotes wellness)
- Internal: Individual or self-wellness (APTA, 2001b; Ardell, 1986b; CDC, 2007b; Dunn, 1961; Jonas, 2000)
- External: Those aspects of wellness that are “outside” of the individual, such as family wellness (Ardell, 1986b; Dunn, 1961)
- Community wellness (APTA, 2001b; Dunn, 1961; Jonas, 2000)
- Environmental wellness (Ardell, 1986b; Dunn, 1961; Jonas, 2000)

My definition of wellness proposes that if a person possesses a satisfactory level of an aspect of wellness, then that individual is aware of specific activities promoting that aspect of wellness, is committed to that aspect of wellness, and participates in activities that promote that aspect of wellness. For example, if Jane 1) knows about a number of activities that promote fitness, 2) participates in those activities, and 3) is committed to a lifestyle that promotes a satisfactory level of fitness wellness, then she has a satisfactory level of fitness wellness. In contrast, if Jane is 1) unaware of how to be fit, 2) does not engage in activities that promote fitness wellness, and/or 3) does not care about her personal fitness, then Jane has an unsatisfactory level of fitness wellness. Of course, one may have a satisfactory level of wellness in one dimension of wellness (e.g., aerobic capacity wellness or nutritional wellness) but have an unsatisfactory level in another aspect of wellness (e.g., flexibility wellness or mental wellness). It is important to reiterate that an individual is defined as having a satisfactory level of wellness only if she or he possesses each of three domains—cognitive, psychomotor, and affective—but an individual has an unsatisfactory level of wellness if she or he is missing one or more of the three domains.

Health Versus Wellness

Some professional organizations have adopted the WHO definition of health based upon the physical, mental, and social triad. The American Occupational Therapy Association (AOTA) supports the notion that health is “the absence of illness, but not necessarily disability, a balance of physical, mental and social well-being attained through socially valued and individually meaningful occupation; enhancement of capacities and opportunity to strive for individual potential; community cohesion and opportunity; and social integration, support and justice, all within and as part of a sustainable ecology” (Wilcock, as cited in AOTA, 2000, p. 656). Other professional organizations, including the APTA (as previously discussed), have not adopted WHO’s paradigm.

While components of health are measured at a specific point in time (e.g., a blood pressure reading or a Beck Depression Inventory score), wellness is an active process that consists of habits and practices (National Wellness Institute, n.d.). Accordingly, in contrast to health, which is static; wellness is dynamic. An individual does not have to be

healthy to be well. Individuals with acute or chronic medical disorders, including a terminal disease such as some forms of cancer, can be well as long as they are practicing a healthy lifestyle. Likewise, an individual does not have to be well to be healthy. For example, a person may be considered healthy if she or he does not exhibit any signs or symptoms of illness or disease; but that individual nonetheless may be engaging in unhealthy behaviors, such as excessive consumption of “junk foods.”

Summary: Health and Wellness

The World Health Organization defines health as “Not merely the absence of disease . . . a state of complete physical, mental and social well-being” (1947, p. 29; 2009, para. 2). “Health promotion is the science and art of helping people change their lifestyle to move toward a state of optimal health . . .” (O’Donnell, 1986, p. 1). The APTA (2001b) divides prevention into three categories: primary, secondary, and tertiary. Numerous definitions of wellness exist. My definition is “A lifestyle that promotes—both internally and externally—the physical, mental, and social health in the cognitive, psychomotor, and affective domains” (Fair, 2000b, p. 2). Health is static and is measured at a specific point in time. In contrast, wellness is dynamic and consists of an individual’s health-related habits and practices over time.

SECTION 2: PREVENTION

Although the emphasis of physical therapy is restorative care (Moffat, 1996), it is within the scope of physical therapists to provide preventative care. Prevention services that medical professionals, including but not limited to physical therapists, medical doctors, and nurses, provide can be categorized into three types: primary prevention, secondary prevention, and tertiary prevention.

Primary Prevention

According to the APTA (2001b), primary prevention is defined as “Prevention of disease in a susceptible population or potentially susceptible population through specific measures such as general health promotion efforts” (p. 32). In the medical community, one definition of primary prevention is “Stopping disease before it starts”; for example, immunization programs (Jonas, 2000, p. 9). Related healthcare professionals define primary prevention similarly. For example, the AOTA (2000, p. 657) defines primary prevention as “Education or health promotion strategies designed to help people avoid the onset of unhealthy conditions, diseases, or injuries.” Compared to secondary prevention and tertiary prevention, a concise description of primary prevention is “pure prevention.” An example of a physical therapist providing primary prevention would be she or he performing lower back screenings at a community health fair.

Secondary Prevention

According to the APTA (2001b), secondary prevention is “Efforts to decrease duration of illness, severity of disease, and sequelae through early diagnosis and prompt intervention” (p. 32). In the medical community, one definition of secondary prevention is “Early detection

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of existing disease before it becomes clinically apparent” (Jonas, 2000, p. 9). An example is screening for hypertension.

Related healthcare professionals define primary prevention similarly. For example, the AOTA (2000, p. 658) states that it “includes the early detection and treatment designed to prevent or disrupt the disabling process.” Compared to primary and tertiary prevention, a concise description of secondary prevention is “early diagnosis and intervention.” Physical therapists integrate secondary prevention into their practice when they perform a systems review (as per APTA, 2001b) and refer to another expert as indicated. If the newly diagnosed problem is within their area of practice, they can (in direct access states) directly manage the problem. Physical therapists also provide tertiary prevention or wellness to those with a chronic or irreversible medical condition.

Tertiary Prevention

According to the APTA, tertiary prevention is described as “Efforts to decrease the degree of disability and promote rehabilitation and restoration of function in patients with chronic and irreversible diseases” (2001b, p. 32). The medical community defines it as “Optimum management of clinically apparent disease so as to prevent or least minimize the development of future complications” (Jonas, 2000, p. 9). An example would be the control of blood sugar level in people with diabetes. Related healthcare professionals define tertiary prevention similarly. For example, the AOTA defines it as “Treatment and services designed to arrest the progression of a condition, prevent further disability, and promote social community” (2000, p. 659). A concise description of tertiary prevention is “wellness for those with a chronic condition.” An example of a tertiary prevention is physical therapist providing maintenance group exercise classes for the residents of a skilled nursing facility.

Prevention: Present and Future

Currently, physical therapists provide primary, secondary, and tertiary preventative care. In the future, the provision of prevention services will expand as more physical therapy students and practitioners become educated in prevention strategies. This provision of preventative care by physical therapists should include the integration of prevention measures in restorative care and direct prevention services. **Figure 1-2** and **Figure 1-3** illustrate my conception of the current and future relationship between prevention and physical therapy, respectively.

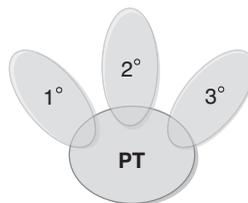


Figure 1-2 The Current Relationship Between Prevention and Physical Therapy

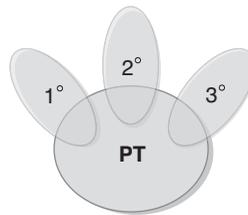


Figure 1-3 Proposed Future Relationship Between Prevention and Physical Therapy

Summary: Prevention

The APTA divides prevention into three categories: 1) primary prevention (i.e., pure prevention); 2) secondary prevention (early diagnosis and intervention); and 3) tertiary prevention (wellness for those with a chronic or irreversible condition). Physical therapists should continue to expand their knowledge of new strategies to improve preventative care measures in their patients/clients.

SECTION 3: HEALTHY PEOPLE

Healthy People is a federal initiative managed by the United States Department of Health and Human Services (DHHS) to quantify and describe the health status, develop health-related goals, and assess changes in the health of the U.S. population. The Healthy People initiatives are updated every decade. The first initiative, *Healthy People 2000*, was established in 1990. *Healthy People 2010* was established in 2000, and by 2010, *Healthy People 2020* will be published. *Healthy People 2010* is relevant to all professions, including physical therapists.

Healthy People 2010 builds on initiatives pursued over the past two decades. The 1979 *Surgeon General's Report*, *Healthy People*, and *Healthy People 2000: National Health Promotion and Disease Prevention Objectives* both established national health objectives and served as the basis for the development of State and community plans. Like its predecessors, Healthy People 2010 was developed through a broad consultation process, built on the best scientific knowledge and designed to measure programs over time. Healthy People 2010 is a set of health objectives for the Nation to achieve over the first decade of the new century. It can be used by many different people, States, communities, professional organizations, and others to help them develop programs to improve health (U.S. DHHS, 2000, para.1)

According to *Healthy People 2010*, the determinants of health are biology, behaviors, social environment, physical environment, and policies. Physical therapists need to consider the patients' biology (i.e., an individual's physical/physiologic status) when they examine, evaluate, diagnose, determine a prognosis and plan of care that includes goals, and provide treatment. The goal is to facilitate the improvement of her or his patients' biology. Additionally, physical therapists must consider and improve their patients' behaviors,

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social environment, and physical environment. Physical therapists also can have a marked influence on state and national policies that affect the profession and patients; these include governmental and other insurance policies; policies of the APTA, and policies of the clinic at which they are employed.

Healthy People 2010 is designed to achieve two overarching goals. The first goal “is to help individuals of all ages increase life expectancy and improve their quality of life [and] the second goal of *Healthy People 2010* is to eliminate health disparities among different segments of the population” (U.S. DHHS, 2000, para.1). *Healthy People 2010* is particularly concerned about disparities due to gender, race/ethnicity, education/income, disability, living in rural localities, and sexual orientation.

According to *Healthy People 2010*, there are 10 leading health indicators: 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. While physical therapists may not play a large role in indicators such as immunization, except perhaps to refer as necessary, we are involved in physical activity and injury and also are involved in obesity and smoking cessation (Rea, Marshak, Neish, & Davis, 2004). I propose that it is appropriate for physical therapists to specialize in obesity and body composition. More information about *Healthy People 2010* is on the Internet (<http://www.healthypeople.gov/>).

Summary: Healthy People

Healthy People is a federal initiative managed by the U.S. Department of Health and Human Services to quantify and describe the health status, develop health-related goals, and assess changes in the health of the U.S. population. Of the *Healthy People 2010*'s determinants of health (biology, behaviors, physical environment, social environment, and policies), physical therapists must recognize that they can help their patients/clients to improve upon these factors as they apply to their lives. *Healthy People 2010* is designed to achieve two overarching goals: 1) increase quality and years of healthy life and 2) eliminate health disparities. While physical therapists may be involved in a variety of *Healthy People 2010*'s leading health indicators, the most relevant are physical activity, injury, and obesity. I propose that it is appropriate for some physical therapists to specialize in obesity and body composition.

SECTION 4: WELLNESS MODELS AND SURVEYS

While there are many definitions of the term *wellness*, because every health promoter has either created her or his own or adopted an established definition, only a few wellness models exist (Ardell, 2009b). The reason is “in part because they take more time to construct and in part, perhaps, because they do not seem as essential to the non-theoreticians of the wellness idea” (Ardell, 2009b, para. 2).

While there are likely more wellness models in existence, six are discussed in this section: 1) Travis' illness/wellness continuum; 2) Ardell's model; 3) Hettler's six-dimensional model; 4) Witmer and Sweeney's holistic model for wellness and prevention over the life span; 5) Adams, Bezner, and Steinhardt's perceived wellness model, and 6) my humanistic

model of wellness (HMW). The illness/wellness continuum is included because it is perhaps the oldest of the ones in use today. Ardell's and Hettler's models are included because they are widely recognized (Ardell, 2009b). To my knowledge, the perceived wellness and the HWM models are the only wellness models in which a physical therapist was involved in its development.

To date, the APTA has not created or adopted a model of wellness. I believe that the wellness model that the association publishes should be in compliance with the World Health Organization's (1947; 2009) stance that there are three components of well-being (i.e., physical, mental, and social) and that additional aspects of wellness should be classified as sub-dimensions. I also contend that the wellness model should be directly applicable to the profession and practice of physical therapy.

Illness–Wellness Continuum

John Travis, MD, developed the “illness–wellness continuum” in 1972 (Ardell, 2009b). Unlike future models, the symbol for this model is a two-way arrow. The extreme right is high-level wellness and the extreme left is premature death. Movement toward high-level wellness includes awareness, education, and growth; while movement toward premature death includes signs, symptoms, and disability (Wellness Associates, 2009).

Ardell's Models of Wellness

Don Ardell, PhD, has developed a series of wellness models. The first appeared in the book *High Level Wellness* (1977) and was illustrated as a simple circle with five dimensions: 1) self-responsibility, 2) physical fitness, 3) stress management, 4) environmental sensitivity, and 5) nutritional awareness. His next model appeared in the book entitled *14 Days to High Level Wellness* (1982). This illustration was a circle with five different dimensions: 1) self-responsibility, 2) relationship dynamics, 3) meaning and purpose, 4) nutritional awareness and physical fitness, and 5) emotional intelligence. His most recent model consists of three domains and 14 skill areas, as follows: 1) the physical domain that consists of exercise and fitness, nutrition, appearance, adaptations/challenges, and lifestyle habits; 2) the mental domain that consists of emotional intelligence, effective decisions, stress management, factual knowledge, and mental health; and 3) the meaning and purpose domain, which consists of meaning and purpose, relationships, humor, and play (Ardell, 2009b).

Although the foundation of Ardell's most recent model is a triad, only two of the three components are consistent with the WHO triad. Of interest, Ardell's meaning and purpose component includes relationships, humor, and play; which I suggest are linked to social wellness.

The Six-Dimensional Model of Wellness

In 1979, William Hettler, PhD, cofounder and current president of the board of directors at the National Wellness Institute (NWI, Stevens Point, Wisconsin), authored an article that showcased what some now recognize as the “six-dimensional model of wellness.” In his model, Hettler (1979) declared that the dimensions of wellness are emotional, intellectual, occupational, physical, social, and spiritual. According to Jonas (2000), Hettler's model of wellness is linked to Ardell's (1977) previous conceptualization of wellness. The

NWI suggests that the physical component goals are “good exercise and eating habits while discounting the use of tobacco, drugs and excessive alcohol consumption”; social component goals are “contributing to one’s environment and community”; emotional component goals are “to be aware of and accept one’s feelings and to feel positive and enthusiastic about oneself and life”; occupational component goals are to “contribute one’s unique gifts, skills and talents to work that is both personally meaningful and rewarding”; and intellectual goals are “to expand knowledge and skills while discovering the potential for sharing one’s gifts with others” (NWI, n.d., para. 7).

Hettler’s six-dimensional model of wellness was expanded into what some consider the “eight-dimensional model of wellness” by Wiener, Mastroianni, and their colleagues at the State University of New York at Stony Brook (Jonas, 2000). The eight-dimensional model of wellness includes the emotional, intellectual, occupational, physical, social, and spiritual dimensions as identified by Hettler, as well as environmental and cultural dimensions. The environmental element emphasizes the pursuit of harmony with the surroundings and the world; including regular contact with nature, balance, and self-preservation (Jonas, 2000). The cultural component emphasizes “an awareness, acceptance, and appreciation for diverse cultures and backgrounds as well as understanding and valuing one’s own culture” (Jonas, 2000, p. 23). More recently, creativity was added as a ninth dimension to the “component-based” conception of wellness (Jonas, 2000). This model has been referred to as the “nine-dimensional model of wellness.” According to Jonas, the creative dimension of wellness draws upon feelings and intelligence and may include building or the arts (e.g., acting, drawing, painting, or sculpting).

Although Hettler’s wellness model is perhaps the most widely recognized of all wellness models, it does not mirror the WHO’s concept of the triage of well-being and consists of dimensions of wellness that should, in my opinion, be classified as sub-dimensions. For example, the emotional, intellectual, and spiritual components should be identified as sub-dimensions of mental wellness.

Holistic Model for Wellness and Prevention Over the Life Span

Witmer and Sweeney presented the “holistic model for wellness and prevention over the life span” in 1992. Myers, Sweeney, and Witmer presented a revised version in 2000. In contrast to its predecessors, this model is rooted in what the creators concluded are the five life tasks: spirituality, self-regulation, work, friendship, and love. Within the spiritual domain, there are two components: 1) inner life and oneness; and 2) values, optimism, and purposiveness. Witmer and Sweeney’s (1992) self-regulation life task is composed of seven components: 1) the sense of personal worth; 2) the sense of personal control; 3) realistic beliefs; 4) emotional responsiveness and spontaneity; 5) intellectual stimulation, creativity, and problem solving; 6) a sense of humor; and 7) health habits and physical fitness. The self-regulation life task consists of items related to both physical and mental wellness and is expansive. It shares elements with Dunn’s (1973) concept of individual wellness and Ardell’s (1977) dimension of self-responsibility. Within Witmer and Sweeney’s (1992) life task of work, which includes but is not limited to gainful employment, homemaking, child-rearing, educational endeavors, and volunteer services, are two components: 1) occupation as a lifespan task; and 2) the economic, psychological, and social benefits of work.

The third life task therefore builds upon concepts proposed by Dunn (1973) and Ardell (1977), and is analogous to Hettler's (1979) occupational dimension of wellness. Their life task of friendship emphasizes connectedness and social interest and thus mirrors the social dimension described by Hettler and writings by Dunn. Witmer and Sweeney's (1992) life task of love speaks to the bond between close friends, family members, and spouses, and includes sexual satisfaction. Witmer and Sweeney's life task of love is in alignment with Dunn's discussions of family, community, and social wellness, and overlaps Hettler's social dimension.

Witmer and Sweeney's wellness model includes the central concepts espoused by other wellness models and can be viewed as a five-component model of wellness: spirituality, self-regulation, work, friendship, and love. Myers et al. (2000) applied this model to the discipline of counseling, but to my knowledge it has not been applied to the profession of physical therapy. Moreover, it is not in alignment with the WHO's triad of well-being. In my opinion, it consists of dimensions of wellness that should be classified as sub-dimensions of wellness and other sub-dimensions of wellness that should be classified as (primary) dimensions (e.g., health habits and physical fitness).

The assessment tool for the holistic model for wellness and prevention over the life span is the Wellness Evaluation Lifestyle (WEL). The purpose of the WEL is to operationalize the model. "The instrument consists of 131 items generated as self-statements to which respondents reply using a five-point Likert scale" (Myers, et al., 2005, para. 1). While the WEL contains 121 items related to mental and social wellness, only 10 questions relate to physical wellness (i.e., three questions related to exercise, three questions related to nutrition, and four questions related to medical self-care). In my opinion, physical therapists might opt to use the WEL to survey the mental wellness of patients/clients, but it is not an appropriate tool to assess physical wellness.

Perceived Wellness Model

Adams, Bezner, and Steinhardt (1997) developed the "perceived wellness model," which contains six dimensions of wellness: physical, social, psychological, emotional, spiritual, and intellectual. Although a physical therapist (Bezner) was involved in creating this model, the emphasis of it is the mental dimension of wellness. I believe that this is a weakness, not only in terms of its applicability to the profession of physical therapy but also in the implication that there are four distinct dimensions related to mental well-being (i.e., psychological, emotional, spiritual, and intellectual), rather than recognizing that each is subcomponent of the dimension of mental wellness. My view was recently supported in an empirical study by Harari, Waehler, and Rogers, who investigated the model and found that there was "no psychometric evidence for the existence of separate [mental] subscale dimensions" (2005, p. 251).

The assessment tool for the model of perceived wellness is the Perceived Wellness Survey (PWS). Its purpose is to operationalize the perceived wellness model. While the 36-item PWS contains five items related to physical wellness (e.g., item number 28; "I expect to always be physically healthy"), they are not directly related to fitness, body composition, or nutritional wellness. Moreover, the majority of the items relate to mental wellness. In my opinion, physical therapists might wish to use the PWS to survey the mental and social wellness of their patient/clients, but it is not an appropriate tool to assess physical wellness.

Humanistic Model of Wellness

In response to the lack of a wellness model that adhered to the WHO's position on the triad of well-being and regulated secondary aspects of wellness to a sub-dimension status, I created the "humanistic model of wellness" (HMW) (Fair, 2002b).

The HMW elevates and expands my definition of wellness (i.e., a lifestyle that both internally and externally promotes physical, mental, and social health in the cognitive, psychomotor, and affective domains). Specifically, it recognizes the importance of the cognitive knowledge of, the affective commitment to, and the psychomotor behaviors associated with the physical, mental, and social dimensions of wellness. The relevance of the learning domains is supported in APTA's *A Normative Model of Physical Therapist Professional Education: 2004 Version*. The model also appreciates that wellness can be applied to oneself (i.e., the internal) and/or to another person (i.e., the external).

The sub-dimensions of the physical dimension of wellness are diseases and medical conditions (that are not primarily mental in nature); drugs; nutrition; aerobic capacity; muscular fitness; flexibility; and body composition. (These sub-dimensions are discussed in Chapters 4 through 7.) The sub-dimensions of the mental aspect of wellness are diseases and conditions that are primarily mental in nature; intellectual stimulation; emotions; behavior-type pattern; locus of control; hardiness; stress; happiness; and purpose of life. (Mental sub-dimensions are discussed in Chapter 8.) The sub-dimensions of the social aspect of wellness are ethics, the family, the community, the environment, the provision of physical therapy, and occupational wellness. (These sub-dimensions are discussed in Chapter 8.)

It is important to recognize that a sub-dimension of one dimension of wellness can overlap the sub-dimension of another. For example, occupational wellness often overlaps several domains of mental wellness, such as intellectual stimulation, stress, and happiness. This overlapping supports the holistic concept of the mind–body connection. Traditional physical therapy as well as complementary alternative medicine (CAM) can enhance one or more sub-dimensions and positively affect overall wellness. As physical therapists, we can improve patient outcomes and satisfaction if we enhance one or more sub-dimensions and address the disease or medical condition that prompted the episode of care. For example, the patient/client might be introduced to the Tai Chi system of exercising to enhance balance and reduce stress.

The assessment tool for the HMW is the Self-Wellness Survey (SWS). (Figures 5-1 to 5-4 in Chapter 5, Figures 6-1 to 6-3 in Chapter 6, Figures 7-1 to 7-3 in Chapter 7, and Figures 8-1 to 8-3 in Chapter 8 are used in the SWS assessment.) The purpose of the survey is to operationalize the HMW. The SWS contains 250 items: 100 are related to nutritional wellness, 72 relate to fitness wellness, 27 are about body composition wellness, and 51 are about mental and social wellness. The instrument is designed to be utilized by a physical therapist as part of the tests and measures section of a physical therapy examination.

Summary: Wellness Models

The APTA has not yet established a model of wellness. The World Health Organization's (1947; 2009) stance is that there are three components of well-being: physical, mental,

and social. I propose that a better model of wellness consists of the three primary dimensions of WHO and secondary aspects of wellness (emotional wellness, spiritual wellness, and fitness wellness) classified as sub-dimensions.

Travis's model, developed in 1972, is a continuum between high-level wellness and premature death. Ardell (1977, 1986, 1990) developed a series of dimensional models, the most recent of which has three domains (physical, mental, and meaning and purpose) and 14 skill areas. Hettler's (1979) model of wellness consists of six dimensions: emotional, intellectual, occupational, physical, social, and spiritual. This model may extend to include occupational, environmental, and creativity components (Jonas, 2000). Witmer and Sweeney's (1992) holistic model of wellness and prevention over the lifespan includes five life tasks: spirituality, self-regulation, work, friendship, and love. Ardell's (1997) model of perceived wellness contains six dimensions of wellness: physical, social, psychological, emotional, spiritual, and intellectual. My humanistic model of wellness (HMW) consists of the three dimensions of well-being as advanced by the WHO (1947; 2009) (physical, mental, and social) and recognizes the three domains of learning (cognitive, psychomotor, and affective), as supported in APTA's *A Normative Model of Physical Therapist Professional Education: 2004 Version*. Of the models discussed, several have corresponding assessment instruments. The SWS, the instrument to operationalize the HMW, is specifically designed to be utilized by a physical therapist as part of the tests and measures section of a physical therapy examination.

SECTION 5: STAGES OF WELLNESS: EXAMINATION, EVALUATION, PLAN OF CARE, AND INTERVENTIONS

When examining a patient's/client's aspect of wellness (e.g., nutritional wellness, aerobic capacity wellness), you must also identify her or his stage of wellness as it relates to that aspect of physical, mental, or social wellness. During the evaluation stage of the session, you must evaluate the findings of your examination. Your evaluation then is used to design your wellness plan of care.

The seven stages of wellness are primordial, pre-contemplation, contemplation, preparation, action, maintenance, and permanent maintenance. As a group, they are an integration and modification of the change models discussed by Dunn (1961), Ardell (1977), and Jonas (2000). Attention to the stages of wellness is critical for physical therapists to successfully enhance the wellness of her or his patient/client. The following sections take a closer look at each stage.

Primordial Stage

A patient/client in the primordial stage is not aware that she or he has a health-related problem and/or that she or he is unknowingly engaging in a behavior that is unhealthy. In other words, the person does not even recognize that a health-related problem exists (Jonas, 2000).

For example, in terms of flexibility, this would be a man who has decreased muscle length in his hamstrings but isn't aware of the impairment. A patient/client in the primordial stage in terms of alcohol abuse consumes three or more alcoholic drinks per day (which exceeds Harvard's School of Public Health [2009a] recommendation of no more

than one drink per day for women and no more than one to two drinks per day for men), but considers her or his alcohol habits to be perfectly normal and harmless.

It is extremely difficult to facilitate change in a patient/client who is in the primordial stage. This is because behavioral change can only occur after an awareness that a problem exists; once that occurs, the patient/client moves to the pre-contemplation, preparation stage, and then on to the action stage. Certainly, patient education is critical. Psychological and interpersonal skills are required also. If the integration of psychological skills is insufficient, the physical therapist should refer the patient/client to a mental health counselor because the provision of direct psychological counseling is outside the scope of physical therapy.

Pre-Contemplation Stage

A patient/client in the pre-contemplation stage has not yet embraced the notion that there is a health-related problem and/or she or he is engaging in unhealthy behaviors, but has begun to recognize that she or he may have a health-related problem and/or poor health habits. In other words, the person accepts her or his current health status but as yet does not have the intention to make a health-related change (Jonas, 2000).

An example of a patient/client in the pre-contemplation stage in terms of flexibility is a man who has decreased muscle length in his hamstrings, and notices that sometimes the back of his thighs are tight. Perhaps he has transiently considered that one day he may need to address the matter, but he has not given it serious consideration. Another example of a patient/client in the pre-contemplation stage is a woman who smokes cigarettes and generally knows that smoking increases the risk of certain medical problems (e.g., cancer) but has not applied that knowledge of these health risks to herself and has not seriously contemplated quitting.

Contemplation Stage

A patient/client in the contemplation stage recognizes that she or he is engaging in a behavior that is linked to a health problem and may begin to investigate that behavior, including its pros and cons, but remains ambivalent about what to do about the situation, if anything (Jonas, 2000).

People move into the contemplation stage at different speeds. Think of this stage as a light bulb being turned on, where sometimes the light brightens slowly as the dimmer switch is slowly raised; in other cases, the light suddenly illuminates a dark room. An example of an abrupt move from the pre-contemplation stage to the contemplation stage would be an obese woman who appreciates that she is perhaps a little overweight, but after looking at a recent photograph of herself recognizes for the first time that she is indeed obese. Another example is a man playing basketball with his teenage children who suddenly becomes so exhausted that he has to sit down. His heart is racing and he thinks, “Wow, I had no idea I was so out of shape!”

Preparation Stage

During the preparation stage, a patient/client has made the choice to change the unhealthy behavior. Her or his unhealthy behavior is either self-assessed or assessed by a professional

and a plan of care is developed (modification of Jonas, 2000). For example, a woman moves from the contemplation stage to the preparation stage when she not only recognizes that she is obese, but makes a conscious decision that she is going to “lose weight” to enhance her body composition. To complete the preparation stage, the woman self-assesses her weight and develops a plan. Better yet, she hires a professional to assess her body composition, alimentation, and exercise habits, and together they develop a plan of care.

An example of fitness wellness assessment is the Fitness Wellness Survey (see Figure 6-3 in Chapter 6). An example of a body composition goal is to reduce the percent of body fat from 32% to between 25% and 28% within 6 months via a healthy 1500 calorie per day diet (e.g., high complex carbohydrate, high fiber, adequate protein, adequate healthy fat, low saturated fat, zero trans fat) and an appropriate exercise regime. This might include aerobic strength training 4 days per week at 30 minutes per session, and brisk walking 1 to 2 days per week for 20 to 30 minutes per session.

Action Stage

When a patient/client enters the action stage, she or he initiates a change in her or his behaviors (Jonas, 2000). For example, a woman who has decided that she will stop smoking discards all of her cigarettes and then buys and applies an over-the-counter nicotine medication.

It is imperative that a person *not* advance directly from the contemplation stage to the action stage. The interim step helps to prepare adequately for the contemplated changes. Skipping the preparation stage increases the risk for failure and may incur an adverse side effect (e.g., a physical injury if the goal involves exercise).

Maintenance

During the maintenance stage, the patient/client is regularly practicing the new behavior (modification of Jonas, 2000). If the problem was smoking cigarettes, the patient/client no longer smokes; if the person was obese, she or he has begun a diet and exercise program; if the problem was stress, the patient/client is now practicing stress-reduction techniques on a regular basis. During the maintenance stage, a lapse or a relapse may occur. A comparison of a lapse and a relapse follows.

Lapse

A lapse is a cessation of a healthy behavior, but the cessation is temporary and does not produce significant adverse effects (modification of Jonas, 2000). A lapse may occur during the maintenance or the permanent maintenance stages. A lapse can be defined as major or minor. A major lapse is one in which the cessation is or was complete or nearly complete. A minor lapse is one in which cessation is or was brief. The case scenarios illustrate the difference between a major and minor lapse.

Case Scenarios

Case 1. Four weeks ago, John established a goal to exercise three times per week. John met his goal for 3 weeks, but during the current week he has exercised only once. This week’s

transgression is a major lapse. (Note: Had John been compliant with his exercise program for a few months and returned to it immediately, this week's transgression would be considered a minor lapse.)

Case 2. One week ago, Rachel established a goal to consume about 1500 calories per day and since that time, she has met her daily goal. Today, however, she consumes about 2800 calories. Rachel's diet today constitutes a major lapse. (Note: If Rachel's maintenance caloric intake was 2000 calories per day and she had consumed 2300 calories today, she would have committed a minor, rather than a major, lapse.)

Case 3. Two years ago, Susan established a goal to exercise four times per week. Since then she has met her goal for most weeks, but on occasion (e.g., once every 6 months) she exercises only twice per week. Last month Susan didn't exercise at all because her relatives from out of town were visiting. As soon as her relatives departed, Susan returned to exercising four times per week. When Susan exercises only twice per week, she commits a minor lapse. However, Susan committed a major lapse when she didn't exercise for a full month. (Note: Susan's month-long transgression is not considered a relapse [discussed below] because she had a very long history of consistent exercise, and suspended her exercise regime for a specific reason and immediately resumed it as soon as her relatives left town.)

Relapse

A relapse is a cessation of a healthy behavior that it is longer than temporary and produces significant adverse affects (modification of Jonas, 2000). Like a lapse, a relapse can be defined as major or minor. A major relapse is one in which the cessation is or was complete (or nearly complete). On example is a patient/client who completely stopped exercising after following a regimen for several months. A minor relapse is one in which cessation is or was not complete (or nearly complete). For example, a woman's goal was to exercise 4 days per week, and while she did exercise 4 days per week for a month, during the second month she has exercised only 2 days per week.

A relapse can occur for a variety of reasons, including but not limited to unrealistic goals, decreased motivation, and a change in circumstances (Jonas, 2000). If a relapse occurs, one should return to the preparation stage (Jonas, 2000). A relapse may occur during the maintenance stage but cannot occur if an individual has truly reached the permanent stage. If a relapse occurs during the permanent maintenance stage, the individual just thought she or he was in the permanent stage, but was actually in the maintenance stage.

Case Scenarios:

Case 1. Two weeks ago, John established a goal to exercise three times per week for 30 minutes per session, but he exercised only once in the first week and did not exercise at all during his second week. John's transgression is significant and should be considered a relapse. John transgression during the first week should be considered a minor relapse and during the second week should be considered a major relapse.

Case 2. Three weeks ago, Rachel established a goal to consume approximately 1500 calories per day in order to reduce her body fat. (Rachel is aware that if she consumes approximately 2000 calories per day, she will maintain her current body fat level.) She met her goal during the first 2 weeks and for the first 3 days of the third week. During the third week, however, Rachel consumed 2000 calories on day four, 2800 calories on day five, 2500 calories on day six, and 2700 calories on day seven. Day four's intake of that third week would not be considered a lapse because she did not consume more than her maintenance caloric input of 2000 calories. On day five of that third week, however, Rachel suffered a minor lapse. Day five's minor lapse evolved into a major lapse or perhaps even a minor relapse by day six. Rachel's relapse from day seven on is considered major because her caloric intake on days five through seven is significantly above her goal as well as significantly above her maintenance caloric intake.

Case 3. Two years ago, Karen established a goal to practice stress-reduction exercises 6 days per week. Karen has met her goal for the past 2 years, but has only practiced stress-reduction exercises once a week for the past 8 weeks. During the first week of her transgression, Karen suffered a minor lapse. (Note: It is considered a minor rather than a major lapse because Karen had been compliant for a significantly extended time frame.) During the second week of her transgression, Karen's minor lapse rose to the status of a major lapse. Her reduction in exercise became a minor relapse during the third week and a major relapse during the fourth weeks of the transgression.

Lapse versus Relapse

It is important to appreciate that a specific transgression (e.g., 1 week of no exercise) in some cases is defined as a lapse and in other cases as a relapse. Generally speaking, if a patient/client has been practicing a healthy behavior for a longer period of time (e.g., many months to years), then she or he is allowed more leeway before a transgression is considered a relapse rather than a simple lapse. For example, if I've been exercising four times per week for 20 years, and I only exercise twice this week, I definitely consider my transgression a minor lapse. However, if I had been sedentary for years and 1 week ago developed a new goal to exercise four times per week; but then only exercised two times this week, I'd consider my transgression a minor relapse.

Consider another example: If Karen is limiting her caloric consumption by avoiding sweets and has a piece of cake at a social gathering, it would be entirely appropriate to consider the offense a minor lapse. However, if Karen ate an inordinate amount of sweets day after day, very soon it would be considered a minor and then a major relapse.

Cessation of a healthy activity should be categorized a lapse (rather than a relapse) if the transgression is secondary to a medical contraindication. For example, if John cannot stretch his right hamstring for 6 weeks because it is in a cast secondary to a femoral fracture, John's extended period of not stretching that hamstring is not a relapse, but a lapse secondary to a medical contraindication. However, John's medical contraindication secondary to a femoral fracture does not extend to noninvolved body parts, such as the stretching of his pectorals.

Case Scenarios:

Case 1. Sharon did not exercise for 10 weeks because she is pregnant. During her initial office visit, her obstetrician told her to not return to exercise until the 13th week of her pregnancy. Prior to her pregnancy, Sharon had been exercising five times per week (with occasional lapses) for her entire adult life. At the beginning of her 13th week of pregnancy, Sharon returned to an exercise protocol that was equal in frequency but slightly decreased in intensity to her pre-pregnancy exercise regime. Now she is 30 weeks into pregnancy and has been exercising in accordance with her protocol since week 13. The 12-week period in which Sharon did not exercise is considered a lapse secondary to a medical contraindication.

Case 2. Jon has a history of abusing alcohol. A month ago, he decided to limit his alcohol consumption to no more than two drinks per day and a maximum of three drinks per week. During the first week, Jon consumed one drink on Friday and two drinks on Saturday. The second week, he consumed two drinks on Friday and two drinks on Saturday. The third week, he consumed three drinks on Friday and four drinks on Saturday. Jon had a minor lapse during week two and a major relapse during week three.

Permanent Maintenance Stage

When an individual has reached the permanent maintenance stage of a behavior, the behavior itself is reinforcing and the person is intrinsically motivated to continue the healthy behavior. Most of us have reached the permanent stage for several health behaviors. A notable behavior is brushing our teeth. If we do not brush our teeth at least once, if not more often per day, then we feel an overwhelming urge to do so. We “just don’t feel right” and will make concerted efforts to perform the activity. Of course, if you are unable to brush your teeth due to circumstances beyond your control (e.g., you are a contestant on the hit reality show *Survivor*), you should not consider it a relapse.

Although a person may experience a lapse in the permanent maintenance stage, she or he is beyond the risk of relapse (modification of Jonas, 2000). If a person experiences a relapse, it is appropriate to state in the evaluation that the person only thought she or he was in the permanent maintenance stage but actually is still in the maintenance stage.

It may take months, if not years, to truly reach the permanent maintenance stage. In some cases, a person never advances to the permanent maintenance stage, and the best she or he can do is remain perpetually in the maintenance stage. An example is an alcoholic who chooses not to imbibe. Another example is a woman who recognizes the importance of eating four servings of vegetables each day, and manages to do so most days but is not intrinsically motivated and believes that it is a burden rather than a pleasure.

Summary: Stages of Wellness

When assessing an aspect of a patient’s/client’s wellness, you must determine her or his stage of wellness as it relates to that aspect. During the evaluation portion of the physical therapy session, you must list the findings and evaluate them. This evaluation can be used to design a wellness plan of care.

The seven stages of wellness are primordial, pre-contemplation, contemplation, preparation, action, maintenance, and permanent maintenance. If a patient/client is completely

unaware of a personal health issue, then she or he is in the primordial stage. When a patient/client has glimmers of recognition of personal health issues, she or he is in the pre-contemplation stage. A patient/client who knows that she or he has personal health issues is in the contemplation stage. When a patient/client makes the choice to change his or her unhealthy behavior, the health issue is either self-assessed or assessed by a professional, and a plan of care is developed, then she or he is in the preparation stage. A patient/client who actually initiates a change in his or her health behavior is in the action stage. One who regularly practices a new health behavior is in the maintenance stage. When a healthy behavior has become a genuine habit, the patient/client has progressed to the permanent stage. A lapse (i.e., temporary cessation of a healthy behavior without significant adverse effects) may occur during the maintenance or permanent stage. A relapse (a longer cessation of a healthy behavior that produces significant adverse effects) can occur during the maintenance stage but not during the permanent stage. If a relapse occurs during the permanent maintenance stage, then the patient/client just thought she or he was in the permanent stage but was actually in the maintenance stage. A lapse and relapse can be defined as major or minor.

SECTION 6: SURVEYS TO ASSESS WELLNESS

An aspect of health can be examined either directly; for example, by using a skinfold caliper to measure body composition, or indirectly through a survey, such as the Beck Depression Inventory to measure the emotions of a patient/client). To directly examine an aspect of wellness, the examiner directly observes a patient's/client's habits and practices related to that aspect of wellness. This time-consuming and rigorous observation would be required because wellness is, by definition, comprised of an individual's habits and practices. To avoid countless hours of direct observation, it is usually appropriate to use a survey to discover information about each aspect of wellness.

The debate about the credibility of survey research began in 1941 when the National Opinion Research Center was established (Raymond, 1991). Noelle-Neumann (1996) reported that because of the early successes of survey research—particularly the election research of Gallup, Crossley, and Roper—a belief emerged that the validity of surveys need not be explored. Despite the lack of quality criteria for validation, Presser (1984) claimed that survey research matured in the early 1980s when the first handbook on survey research was published.

While survey results are subject to the limitations associated with self-reported data, information obtained within it may explain unique variance data not otherwise accounted for in more objective measurements of health (Nunnally, 1978). In fact, self-report variability can be viewed as additional information rather than an error to be controlled (Nunnally, 1978). However, to minimize the limitations of a survey, the questions should be developed in accordance with survey guidelines. Surveys should include clear and succinct instructions (Andrews, 1984; Best & Kahn, 1989; Gall, Gall, & Borg, 2003; van Dalen, 1979) that are of medium length, 16 to 64 words according to Andrews (1984), should be neither too short (Andrews, 1984) nor too long (Gall et al., 2003), and the items should be numbered and organized into a logical sequence (Gall et al., 2003; van Dalen, 1979). Medium and longer length items (16–24 words or ≥ 25 words, respectively) should be prefaced by a

medium-length introduction. Long introductions followed by shorter or longer items should be avoided (Andrews, 1984). Items should encourage a complete response (Best & Kahn, 1979; van Dalen, 1979). For example, subordinate items or an exhaustive list of alternative choices should be provided (van Dalen, 1979). Complex terms and jargon that prospective respondents might not understand should be avoided (Gall et al., 2003; van Dalen, 1979). Items that might be misunderstood should be defined (Gall et al., 2003) or linked to an example (Best & Kahn, 1979). “Double-barreled” items that require the respondent to respond to more than one idea in single response should be avoided. Avoid the use of double negatives (Best & Kahn, 1979; Gall et al., 2003) and leading or biased items (Gall et al., 2003). Descriptive adverbs and adjectives that have vague meanings (e.g., *rarely*, *seldom*, and *occasionally*) should be used with caution (Best & Kahn, 1979) or avoided (Gall et al., 2003). Emphasized words should be underlined (Best & Kahn, 1979). A reference point should be provided for a comparison or rating (Best & Kahn, 1979). Items should be phrased so that they are applicable to all prospective respondents (Best & Kahn, 1979). Surveys should begin with non-threatening items (Gall et al., 2003; van Dalen, 1979). Emotionally difficult and threatening items (e.g., those related to smoking or use of anabolic steroids) should be placed near the end of the survey (Mirabella, 2003a). Important items should not be placed at the end of the survey (Gall et al., 2003).

According to Mirabella (2003a), a survey item can assess attitude, knowledge, or behavior. Attitude (affective) items assess satisfaction or agreement. An example of an attitude question is “How important do you think it is to engage in exercise at least 30 minutes at least five times per week?” Knowledge (cognitive) items assess the respondent’s understanding of a specific issue. An example of a knowledge question is “Which of the following describes the *Healthy People 2010* guidelines regarding the recommended frequency and duration of exercise?” A behavior (psychomotor) item assesses the variables (e.g., when, how often, how much) of a selected behavior. An example of a behavioral item is “Of the following, which best describes your level of exercise during the past week?”

In my chapters about the various aspects of wellness (e.g., nutritional wellness, mental wellness), I introduce wellness surveys that I have developed during my discussion of the respective Examination section. The rationale for the content within each of these surveys was based upon research related to the topic and to survey research. For example, my fitness wellness surveys were based, in part, upon the *ACSM’s Guidelines for Exercise Testing and Prescription* (American College of Sports Medicine, 2006), the United States Department of Health and Human Services’ (2000) *Healthy People 2010*, relevant publications of the APTA including the *Guide to Physical Therapist Practice* (APTA, 2001b), and survey research.

Summary: Surveys to Assess Wellness

An aspect of health can be examined directly (e.g., a skinfold caliper) or indirectly through a survey (e.g., the Beck Depression Inventory). It is cost- and time-efficient to examine an aspect of wellness indirectly through a survey. In the chapters about the various aspects of wellness, I introduce wellness surveys developed during my discussion of the respective Examination section.