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CHAPTER 1
WELLNESS AND PHYSICAL THERAPY

OBJECTIVES

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

1. Discuss the impact of the Commission on the Accreditation of Physical Therapy Examiners (CAPTE) and APTA's Normative Model of Physical Therapist Education on student physical therapist education related to wellness, health promotion, and prevention.
2. Discuss the provision of wellness education by physical therapists.
3. Examine the use of case scenarios in student physical therapist education and why they are important.
4. As they relate to the use of case scenarios in the education of student physical therapists, differentiate cognitive, psychomotor, and affective competence.
5. In a mock scenario, demonstrate the communication skills (including conflict management and negotiation skills) the APTA states physical therapist graduates should possess.
6. As stipulated by the World Health Organization (WHO), identify the three domains of health and well-being.
7. Compare the definitions of health promotion espoused by the World Confederation for Physical (WCPT) and Elizabeth Neilson, PhD.
8. Identify the four components of holistic physical therapy.
9. Compare four types of medicine/interventions: modern, traditional, alternative, and complementary.
10. Compare the definitions of prevention espoused by the Centers for Disease Control (CDC) and the American Physical Therapy Association (APTA).
11. Compare high-level wellness and low-level wellness and provide examples of each.
12. Compare the definitions of wellness as stated by Halburt Dunn, MD, PhD; the World Confederation for Physical (WCPT); Donald Ardell, PhD; and Janet Bezner, PT, PhD.
13. Discuss the care provided by reconstruction aides and explain why it was sometimes referred to as alternative medicine.
14. Identify Halbert Dunn as the 'father of the wellness movement' and explore his contributions.
15. Articulate how Donald Ardell capitalized on Dunn's concept of high-level wellness.
16. Briefly discuss *Healthy People* and its Leading Health Indicators (LHIs).
17. Identify the contributions Elizabeth Neilson made to the wellness movement.
18. Highlight the progression of the APTA into the wellness arena.
19. As it relates to the provision of wellness education and holistic physical therapy, discuss the physical therapist scope of practice (professional, jurisdictional, and personal).

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SECTION 1: STUDENT PHYSICAL THERAPIST STUDY OF WELLNESS

Study without desire spoils the memory, and it retains nothing it takes in.
Leonardo da Vinci (1452-1519)

COMMISSION ON THE ACCREDITATION OF PHYSICAL THERAPY EXAMINERS (CAPTE)

The **Commission on the Accreditation of Physical Therapy Examiners** (**CAPTE**), by whom doctorate of physical therapy programs must be accredited to confer doctorate of physical therapy (DPT) degrees, stipulates entry-level physical therapist students must demonstrate the ability to "…address primary, secondary and tertiary prevention, health promotion, and wellness to individuals, groups, and communities" (CAPTE, 2020s, p32).

AMERICAN PHYSICAL THERAPY ASSOCIATION (APTA)

To help achieve the mandate related to wellness as set forth by CAPTE, the **American Physical Therapy Association** (**APTA**), through the *Normative Model of Physical Therapist Education* (hereinafter referred to as *PT Normative Model*) created Practice Management Expectation 19, which is dedicated to "prevention, health promotion, fitness and wellness" (2004, p65). Section 19.1 of the *PT Normative Model* states the graduate will "provide culturally competent physical therapy services for prevention, health promotion, fitness, and wellness to individuals, groups, and communities" (APTA, 2004, p 65). To achieve these educational outcomes, the APTA (2004, p 65) states the physical therapist graduate competently:

1. Conducts screening.
2. Assesses the health needs of the individuals, groups, and communities.
3. Sets priorities for identified health needs and refers to others when necessary.
4. Implements prevention, health promotion, fitness and wellness programs that incorporate available and best evidence.
5. Assess the effectiveness of a client's prevention and wellness program using epidemiologic principles.
6. Ensures that prevention, health promotion, and fitness activities that are directed to the physical therapist assistant do not require the knowledge and skills of the physical therapist.

Section 19.2 of the *PT Normative Model* states the graduate will "promote health and quality of life by providing information on health promotion, fitness, wellness, disease, impairment, functional limitation, disability, and health risks related to age, sex, culture, and lifestyle within the scope of the physical therapy practice" (APTA, 2004, p65). To achieve these outcomes, the APTA (2004, p65) states the physical therapist graduate competently:

1. Educates patients/clients about health promotion, wellness, and health maintenance.
2. Identifies and provides information appropriate to the health needs of individuals and groups.
3. Incorporates the concepts of motivation, behavior modification, locus of control, and modeling in health maintenance and health promotion activities.
4. Provides education/services on prevention and wellness to patients/clients.
5. Functions as a consultant on health-related issues.

Section 19.3 of the *PT Normative Model* states the graduate will "apply principles of prevention to defined population groups" (ATPA, 2004, p 66). To achieve these educational outcomes, the APTA (2004, p66) states the graduate:

1. Applies epidemiological principles to recognize potential and actual risks for disease, impairment, functional limitation, or disability for defined populations.
2. Applies population-based strategies to identify and reduce risk factors and to improve patients'/clients' use of and access to appropriate services and providers.
3. Identifies the role of the physical therapy in reducing these risks.
4. Participates in legislative and other policy implementation to support programs to help reduce these risks.

In the Promotion of Health, Wellness, and Prevention section of their Minimum Required Skills of Physical Therapist Graduates at Entry-Level guideline, the APTA (2005m, p18) states the student will:

1. Identify patient/client health risks during the history and physical via the systems review.
2. Take vital signs of every patient/client during each visit.

3. Collaborate with the patient/client to develop and implement a plan to address health risks.
4. Determine readiness for behavioral change.
5. Identify available resources in the community to assist in the achievement of the plan.
6. Identify secondary and tertiary effects of disability.
7. Demonstrate healthy behaviors.
8. Promote health/wellness in the community.

THE PROVISION OF WELLNESS EDUCATION BY PHYSICAL THERAPISTS

Historically, physical therapists have engaged and educated patients in structured physical exercise, an important component of **physical activity** wellness (Busse et al, 2017; Lein et al, 2017; Malmo 2020). More recently, physical therapists have started to teach **body composition** wellness (Allison et al, 2019; Dean et al, 2019; Rea et al, 2004) and **smoking cessation** (Lein et al, 2017; Pignatar et al, 2015; Rea et al, 2004; Thind et al, 2016). While physical therapists are increasingly providing education to enhance **nutrition** wellness (Fair, 2004; Malmo, 2020; Rea et al, 2004), there are nutrition interventions that are clearly outside of our purview. For example, while we may provide basic nutritional education to a patient with a diagnosis of non-insulin diabetes mellitus (NIDDM), we would be more cautious with a patient with insulin dependent diabetes mellitus (IDDM) and refer her to her primary care physician (PCP) - or communicate with her PCP and refer her to a registered dietician (**RD**). We continue to provide **holistic physical therapy** when we take into account the IDDM diagnosis and instruct the patient to take her blood sugar level before each visit, just as we measure pain and blood pressure each visit (APTA, 2005). After all, we would not want our patient to engage in exercise if her blood glucose level is already too low and cause her to go into a diabetic shock! Physical therapists are also branching into the **mental** and **social** components of wellness (Fair, 2004). For example, Lotzke (2019) found that compared to conventional preoperative care, a person-centered prehabilitation program based on cognitive-behavioral physical therapy was linked to a more substantial improvement in physical activity intensity, the One Leg Stand Test, and the number of steps per day at the six-month follow-up of lumbar fusion surgery. Patients also ask questions of and expect answers from physical therapists regarding a variety of health-related topics (Black et al, 2016; Rea et al, 2004). For example, 91.3% of patients agree their physical therapist should speak to them about physical activity, 73.0% about healthy weight, 51.3% about smoking, and 32.1% about fruit and vegetable consumption (Black et al, 2016)

THE USE OF CASE SCENARIOS IN STUDENT PHYSICAL THERAPIST EDUCATION

As student physical therapists in a classroom setting learn about the provision of physical therapy, they practice on each other – they conduct a test, provide a treatment, etc. The ability to transfer their acquired knowledge to a real patient must also be practiced to be learned because it requires not only **cognitive** and **psychomotor** competence, but also **affective** (or "feeling") competence. Because it is not very often practical to have people with medical conditions commonly treated by physical therapists visit the classroom and serve as 'mock patients,' case scenarios are an important teaching / learning strategy to promote student physical therapist affective competence. In fact, research has concluded that using case scenarios in the physical therapy classroom is *critical* in the preparation of student physical therapists to become competent entry-level physical therapists (e.g., Adame-Walker et al, 2020; Greenwood et al, 2017). Case scenarios invite and indeed require student physical therapists to consider and demonstrate the affective components of the provision of physical therapy,

tural competence, professional behavior, professional development, and safety (Adame-Walker et al, 2020). Compassion and caring are also important (Catalino et al, 2015). Of these core abilities, the ability to effectively communicate is the most important (Greenwood et al, 2017). In fact, **communication** – which includes interpersonal, verbal, written, and electronic modes of interaction (ATPA, 2005d) – is the "foundation of entry-level practice" (Adame-Walker et al, 2020, p7).

Because it is imperative to be able to competently communicate with their patients (and their caregivers, colleagues, etc.), the student physical therapist ought to endeavor to master basic communication skills. According to the APTA (2005m, p18), the *minimum* communication skills (including conflict management and negotiation skills) of a student physical therapist graduate are:

1. Develop a rapport with patients/clients and others.
2. Display sensitivity to the needs of others.
3. Actively listen to others.
4. Engender confidence of others.
5. Ask questions in a manner that elicits needed responses.
6. Modify communication to meet the needs of the audience.
7. Demonstrate congruence between verbal and non-verbal messages.
8. Us appropriate grammar, syntax, spelling, and punctuation in written communication.
9. Use appropriate, and where available, standard terminology and abbreviations.
10. Maintain professional relationship with all persons.
11. Adapt communication in ways that recognize and respect the knowledge and experiences of colleagues and others.
12. Recognize potential for conflict.
13. Implement strategies to prevent and/or resolve conflict.
14. Seek resources to resolve conflict when necessary.

Case 1-1.1. Hilda

You are an outpatient physical therapist starting your first session with patient Hilda, who sustained a left tibia fracture secondary to an accidental fall. Bearing in the mind the communication skills listed by the APTA, partner with a classmate and interact with your mock patient to illustrate how you would learn the details of Hilda's fall.

Case 1-1.2. James

You are a physical therapist working in acute care and are starting your first visit with patient James, who is 24-hours status post a right total knee arthroplasty. James is having difficulty removing the cold pack from his knee region, so you teach and assist him in doffing it. Bearing in the mind the communication skills listed by the APTA, partner with a classmate and interact with your mock patient James to illustrate how you would examine his pain, and began to instruct him in pain management. (We will continue our visit with James in Case 2-3.5. James, on page 38.)

SECTION 2:
WELLNESS-RELATED TERMINOLOGY AND CONCEPTS

Just definitions either prevent or put an end to a dispute.
Nathaniel Emmons (1745-1840)

HEALTH

The **World Health Organization** (**WHO**), the agency within the United Nations concerned with international public health, has since 1947, defined **health** as “a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity” (2022c, para 1). In other words, well-being is a triad of physical, mental, and social.

HEALTH PROMOTION

The **World Confederation for Physical Therapy** (**WCPT**) definition of **health promotion** is quite detailed: “the combination of educational and environmental supports for actions and conditions of living conducive to health. The purpose of health promotion is to enable people to gain greater control over the determinants of their own health. Health promotion represents a comprehensive social and political process, it not only embraces actions directed at strengthening the skills and the capabilities of individuals, but also action directed towards changing social, environmental and economic conditions so as to alleviate their impact on public and individual health. Health promotion, and the associated efforts put into education, community development, policy, legislation and regulation, are equally valid for prevention of communicable diseases, injury and violence, and mental problems, as they are for prevention of non-communicable diseases” (2011, p19). We will later compare this definition to the one advocated by the *American Journal of Health Promotion's* (provided on pages 13-14.)

HOLISTIC PHYSICAL THERAPY

The practice of **holistic physical therapy** consists of four components: (1) engage in **ongoing and iterative** examination, evaluation, and, when and if indicated, **referral** of patients; (2) provide robust patient (and, when appropriate family / caregiver) interaction and **education**; (3) integrate **‘complementary’ interventions** as appropriate; (4) recognize **patient wellness**, or **physical, mental, and social behaviors and practices**, has a significant impact on overall **health** as well as ability to both participate in and benefit from physical therapy. Although the APTA has, since its inception, promoted the components of holistic physical therapy, I am a proponent of emphasizing the term **holistic physical therapy** because the concepts have not been embraced by the physical therapy profession as a whole. Holistic Physical Therapy is explored in ‘Chapter 2: Model of Holistic Physical Therapy’ and ‘Chapter 3: Holistic Physical Therapy Patient Management;’ and its concepts are woven throughout this textbook.