
Introduction to Physical Therapy

INTRODUCTION TO PHYSICAL THERAPY

Welcome

What sparked your interest in becoming a physical therapy aide? Perhaps you volunteered in a hospital or outpatient clinic after recovering from an injury. Perhaps you spent time caring for a family member who suffered from a debilitating injury or disease. Or perhaps you have a background in health care which provoked interest in this growing field. Whatever your reason, you'll find the work of a physical therapy aide to be interesting and challenging.

Before beginning your study, take a few minutes to answer the following question. What personal qualities do you think a physical therapy aide should possess?

Your answers might include the following:

- Responsible
- Observant
- Empathetic
- Dependable

- Physically fit
- Likes challenges
- Works well with people of all ages

As you learn about the field, you'll begin to understand why each of these qualities is important. Take some time to determine which you already possess, and which you should focus on developing during your studies.

Your program will also help you gain the essential skills you need to achieve success as a physical therapy aide.

THE HISTORY OF PHYSICAL THERAPY

Overview

Since World War I, the physical therapy profession has undergone tremendous growth, and current trends in health care indicate continued expansion. A knowledge of physical therapy's early history provides insight into the profession's focus as well as helps you appreciate its early pioneers.

When you complete this section, you'll be able to

- Name two key individuals whose achievements contributed to the development of the physical therapy profession
- Identify two events that contributed to the beginning of the physical therapy profession
- Identify the role of the "reconstruction aides" during World War I

The Profession's Evolution

Early cultures, such as the Greeks and Romans, utilized the therapeutic benefits of hot baths, massage, and exercise—all components of modern physical therapy treatments. In England, an ancient city established by the Romans was even

named “Bath,” after the flowing waters and pool systems which were incorporated into the city’s design for the health of its residents (Figure 1).



FIGURE 1—The English City of Bath

Modern medicine began to incorporate some of these physical techniques as early as the eighteenth century. For example, physical therapy was first utilized as part of treatment for the many individuals who fell victim to infantile paralysis in the late 1800s. By the nineteenth century, teams of nonmedical personnel were established to care for these individuals, and they began to utilize *hydrotherapy*, or water treatment, and other forms of physical therapy (Figure 2).

World War I focused more attention on the profession as its members helped to restore physical function to the injured. In 1921, the American Physical Therapy Association (APTA) was established and headed by Mary McMillan, an American trained in England in physical therapy techniques. She is recognized as the first physical therapist in the United States. APTA, originally a woman’s organization, was created to establish and maintain professional and scientific standards for those engaged in the profession of “physical therapeutics.” APTA began admitting men in 1922. APTA now has more than 56,000 members.

FIGURE 2—Many physical therapy treatments utilized today have been in use in some form for many years.



Early Training and Education

In 1918, Marguerite Sanderson, a graduate of Wellesley College, developed one of the first outlines for a course of study to train a group of physical therapists. These therapists were trained to rehabilitate soldiers returning from World War I with wounds such as infections, burns, spinal cord injuries, deformities of arms and legs, and amputations. Because the soldiers all required physical, “reconstructive” care, the therapists were called *reconstructive aides*.

As a result of the wartime push to train more individuals in physical therapeutic care, the army realized the way to end the shortage was to establish a formal education and training

program. In 1922, the first postwar basic physiotherapy training program was established at Walter Reed General Hospital. These reconstruction aides were called *physiotherapy aides*. At first, the course was only four months long. By 1934, however, one full year of education was necessary to produce a qualified, professional therapist.

At the same time, physical therapy programs were being developed in private institutions. By the late 1920s, there were as many as 12 institutions with approved programs in physical therapy. In 1928, these programs, along with the army programs, were accredited by APTA.

By 1921, the number of physical therapy programs in army hospitals was reduced, as World War I patients were discharged or transferred to nonmilitary hospitals. Some aides remained in army hospitals, but the majority moved back into civilian life. As a result, nonmilitary physicians began to recognize the value and need for these services in their own communities. The newly trained aides were eventually employed in facilities such as industrial accident clinics, schools for the disabled, and nonmilitary hospitals.

Originally, physical therapy treatment consisted of only a few techniques, including

- Hydrotherapy
- Electrotherapy
- Mechanotherapy
- Massage therapy
- Exercise

Aides attempted to restore patients' muscular and nervous function by utilizing these treatments under the direction of a physician. You'll learn more about each of these treatments later in your program.

Important Historical Events

Two major events contributed to the acceleration of physical therapy education: World War II and the polio epidemic of the 1940s and 1950s.

The first crisis was the outbreak of World War II (Figure 3). Due to the development of antibiotics, such as sulfa and penicillin, along with the creation of more sophisticated transportation methods, such as jeeps, helicopters, and ambulances, more soldiers survived their wounds and injuries. The injuries were similar to those treated in World War I, but in greater numbers and severity. Rehabilitation programs for the injured became lengthier and more complicated.

FIGURE 3—The outbreak of World War II forever changed the face of medicine.



The second crisis involved the polio epidemic of the 1940s and 1950s. A large proportion of the population was afflicted with polio, an acute, infectious virus which affects the nervous system, causing weakness and/or paralysis to various parts of the body. Survivors required physical therapy to strengthen muscles, and in many cases, to learn to walk again.

These two events placed serious demands on the limited number of qualified individuals available to treat patients. Therapists in private institutions, the military, and the civilian community met the challenge by combining forces and developing more—and more detailed—physical therapy programs.

Since the 1940s, APTA has played an active role in developing strong physical therapy education programs and in defining the curriculum. APTA ensures that the highest standards are maintained. As stated earlier, physical therapists originally spent four to twelve months in training. Today, however, APTA requires physical therapists to acquire at least a bachelor's degree. Many therapists choose to further their studies by obtaining a master's or doctoral degree.

Today, over 130 physical therapy education programs exist in North America, and this number continues to grow. However, despite the number of educational programs available, the need for physical therapy services is still greater than the supply.

The field has expanded to include the development of programs to train physical therapist assistants and physical therapy aides. In addition, injury rehabilitation now addresses damage to the health of the whole person by including vocational and psychological counseling services as well as physical therapy.

Evolving Terminology

In the earliest days, physical therapy treatment was referred to as *reconstruction* or *physiotherapy*. As you've learned, World War I therapists were *called reconstruction aides*, and *later physiotherapy aides*.

Today, the term *physiotherapy* is still used in countries such as England and Canada, where physical therapists are called *physiotherapists*. In the United States, the profession is referred to as *physical therapy*, and therapists are *called physical therapists*.

Whatever the terminology, the meaning is clear: physical therapy professionals are important members of the health care team.

Summary

Physical therapy has developed from a very basic training program in the 1940s into the specialized, dynamic, well-respected profession it is today. Several levels of formal education are available for advanced training with licensure and certification as the end result. Today, therapists, assistants, and aides are involved in working with patients in many types of settings, including

- Occupational injury clinics
- Schools for the disabled
- Sports medicine clinics
- Public and private rehabilitation units
- Acute-care settings

In the next section, we'll look at the physical therapy aide's role in the rehabilitation process. We'll review the different kinds of settings in which you, the physical therapy aide, may work, the types of patients you may care for, the types of injuries you may assist in treating, and the methods you may utilize to help treat these patients. In addition, we'll take a look at the roles other medical professionals play on the rehabilitation team.

THE PRACTICE OF PHYSICAL THERAPY

Overview

It's vital that you understand the different roles of the physical therapist, the physical therapist assistant, and the physical therapy aide. Overstepping professional boundaries causes confusion and can result in patient injury.

The physical therapy aide is a supportive member of the physical therapy team whose duties are directly supervised by the physical therapist or the physical therapist assistant. Licensure isn't currently required to work as a physical therapy aide.