Physical Therapy Work Settings

All physical therapists use physical agents in the treatments they give, but there are many specialties within physical therapy because there are many different kinds of patients. There are also many different kinds of work you might do. It would be impossible to tell you about every type of hospital, institution, agency, and specialty where physical therapists work. In this chapter, the larger categories of employment opportunities will be described. Two-thirds of physical therapists work in hospitals or physical therapy offices.

In general hospitals the care is centered around patients with acute diseases and disabilities. Some of these are admitted primarily for physical therapy and rehabilitation procedures, while others are admitted for medical or surgical care but receive physical therapy as an additional aid to recovery.

Many patients are outpatients in hospital departments or private practice offices. Nursing homes and rehabilitation centers employ physical therapists. Patients who live at home, but who are too infirm to be transported, are treated in their homes. Schools must also employ physical therapists. Sports medicine and industrial clinics are gaining in importance.

The Hospital Setting

Hospitals in big cities usually have large, well-equipped departments. The medical director might be a physiatrist (a doctor specializing in physical medicine and rehabilitation) who is on duty in the department full-time to examine all new patients, to prescribe and observe treatment and the patient’s reaction to it, to change orders of other physicians, and to recommend specific types of braces and artificial limbs. There are relatively few physiatrists in our country, however. In most hospitals, an orthopedist (a bone and joint specialist) or an internist (a physician specializing in internal diseases) will serve a specific number of hours each month to review referrals, assist in the solution of difficult problems, and serve as a liaison with the medical staff. In some larger, more progressive hospitals, there has been a trend toward the establishment of a committee or board to serve as the medical consultant team. This board is usually composed of an orthopedist, a neurologist, an internist, a rheumatologist, a psychiatrist, and, if possible, a specialist in respiratory disease. The committee meets regularly with the physical therapy director to review administrative, medical, and legal problems.

Except for a very few hospitals where a physiatrist is on duty all day, the working director is the physical therapist in charge of the department. This therapist might be called “director” or “supervisor” or “chief” depending on the hospital, but whatever the title, her or his responsibilities are the same, operating an efficient department that gives every patient the best possible care.

Very large departments may have as many as thirty or thirty-five physical therapists and physical therapist assistants, while a small department may have only the chief physical therapist and one assistant. There will also be nonprofessional aides and orderlies who transport patients, make beds, sort linen, clean equipment, and fill hydrotherapy tanks. All large departments have clerk-receptionists who receive patients and direct them to the proper areas, make out bills, answer the phone, deliver messages, type routine letters and reports, and file.

In small hospitals the medical director may be an orthopedist, internist, or general practitioner serving without salary on an on-call basis. He or she may give very little supervision to the physical therapy staff and be called only in a crisis. In such a department, the chief therapist is responsible for all direct patient care and all administrative details. The small department may or may not have sub professional, nonprofessional, and clerical staff.

The larger physical therapy departments usually have a reception room, an office, and an electrotherapy area where patients receive treatments such as diathermy, ultrasound, infrared, ultraviolet, hot packs, ice, electrical stimulation, paraffin, traction, massage, and some of the exercise programs. In the hydrotherapy area there may be a pool or a key-shaped Hubbard tank where patients lie for underwater exercises. There are usually a number of smaller whirlpools also. The gymnasium, or exercise room, has a set of parallel bars, walkers, and crutches,
canes, and practice staircases for walking training. Often there are stall bars, shoulder wheels, pulleys, wrist rolls, finger ladders, wands, weights, bicycles, floor mats, and other exercise equipment, such as the Cyber unit, Orthotron, and NK table.

Many small departments consist of only one room, with one machine of each type in it, as well as the gait-training equipment and office furniture. In such a small department, every inch of space must be used to maximum efficiency.

Although the patients in general hospitals suffer from a variety of difficulties, those receiving physical therapy usually suffer from the same problems of arthritis, strokes, fractures, lacerations, ruptured discs, and other back and posture-related difficulties. In some of the larger metropolitan hospitals with many specialists, the physical therapist may treat patients with the rarer neuromuscular diseases such as multiple sclerosis, muscular dystrophy, transverse myelitis, and the Guillame-Barre syndrome, Parkinson's disease, and post-polio syndrome.

Physical therapy also is used for patients suffering from lung diseases such as asthma and its complications, pneumonia, cystic fibrosis, and many others. Physical therapists can help these patients by instructing them in pulmonary exercises and by performing postural drainage.

In centers where there is a great deal of heart surgery performed, or where there is a cardiac care unit, the physical therapist may develop an exercise program to increase strength and endurance and to increase the amount of air the patient can inhale and exhale. Following surgery, a patient is instructed in exercises to correct posture and to increase shoulder motion.

Some skin problems, such as ulcers and burns, are treated with whirlpool, iontophoresis, hyper-baric oxygen, and ultraviolet light.

Involvement of physical therapists in obstetrics and gynecology will vary with the interest of the doctors in certain types of problems, use of natural childbirth, and post-delivery rehabilitation.

In some institutions the physical therapist works with the orthodontist on problems of the temporal mandibular joint, in facial exercises, and in correcting postural problems that are now recognized to be concurrent with some dental problems.

In some hospitals, physical therapists as well as occupational therapists treat patients in psychiatric wards.

Each hospital and department has a personality of its own. In big cities, where the crime rate is high, many gunshot and stab wound patients may receive intensive physical therapy during the rehabilitation period. In large industrial communities, the number of trauma patients from job-related injuries can be high. Many of these patients have fractures from falls, brain damage from blows to the head, and severe lacerations from machinery.

Hospitals in mining communities also treat large numbers of industrial accident cases that occur in the mines. In farming communities, hand injuries result from accidents that occur while people are feeding animals or repairing farm machinery. In sheep and cattle country, sheep herders and ranchers suffer from fractures and ruptured spinal discs from falling off horses, especially before and during rodeo season. Burns are common in areas where there are foundries and steel mills. In ski resorts there are many people with fractured legs. In the retirement areas of Florida and Arizona there are many older patients with strokes and arthritis.

In large hospitals, therapists have an excellent opportunity to attend medical staff conferences, special medical seminars, and ward rounds. They may also participate in experiments and research. Usually, physical therapy students obtain their clinical experience in the larger, better equipped hospitals in more cosmopolitan centers, so the staff in these hospitals can participate in their training program.

Therapists in small departments, in small hospitals, and in small towns see fewer rare diseases, have less opportunity to share in medical education, and have fewer opportunities to teach. They may need more imagination and initiative. A therapist in a small hospital may have to convert an area never intended for physical therapy into an efficient department. He or she will function with very little medical supervision. One rewarding difference, however, is that in a small hospital, there is a much closer relationship between all personnel.
Small hospitals, especially those in rural areas, sometimes suffer from staffing shortages. In these hospitals, a heavier caseload will require a therapist to work faster and to limit conversation with the patient. If the caseload is lighter, the therapist will have time to relate more to patients, to read, and study.

Life in the general hospital is dramatic, the pace is fast, and the patient turnover is rapid. There is more rejoicing with the patients over their rapid recovery and more pathos from unexpected deaths. There is a greater variety in diagnosis and a wider choice of treatments to administer than in the smaller hospital.

**PEDIATRICS**

Every child is appealing and lovable, but the handicapped and helpless child needs more than the expression of love through tender words and cuddling. He or she needs the expression of love through deeds. There is nothing more gratifying to a physical therapist than the knowledge that, through his or her efforts, a handicapped child has learned to cope better with life’s problems. Perhaps this is the reason why almost every physical therapy student expresses a desire to work with children for at least a short period.

Some large cities and some smaller cities with large medical school complexes have general hospitals exclusively for children. The children may be as young as newborns or as old as twelve or fourteen. They may have acute diseases or they may have chronic conditions requiring reconstructive procedures.

Only a small percentage of the children in these hospitals require physical therapy. Many of the children receiving physical therapy in the hospitals for the acutely ill suffer from cystic fibrosis (a disease that affects many parts of the body, but especially the lungs), or they receive pre-operative and post-operative care when surgery to the muscles, tendons, joints, or nerves will make motion easier and more effective.

Most children’s hospitals offer programs of extended convalescent care or prolonged "habilitation" programs. The children remain in these hospitals from several weeks to several years. There are usually school programs, scout troops, and other organized social activities within the hospital.

About 25 percent of all orthopedically handicapped children require a period of hospitalization, and one-third of these live in rural areas where there are no facilities for medical care. For this reason, rural children must remain hospitalized for longer periods than children in large cities who may report for treatment to hospitals or private offices or may receive treatment in the schools.

The furniture and treatment equipment in children’s hospitals are child size. Instead of walkers, the children sometimes use weighted doll buggies. Some children develop their walking skill by using skis equipped with high poles to hold. The therapist frequently treats the children on a mat on the floor rather than on a high treatment table. There is also a great deal of pool work to encourage general and specific motions.

If you were working in a children’s hospital, you would discuss your treatment objectives with the nurses in each ward, so that the treatment plan would be reinforced in play time and in school sessions. You would also work closely with the occupational and speech therapists to coordinate and intensify each treatment program. When a child was ready for discharge, you would give the parents detailed instructions in the necessary exercises that they would continue at home.

**PUBLIC SCHOOLS**

Some metropolitan areas have special schools with specific equipment for handicapped children, while smaller communities may have one classroom housed in a regular school building. Most programs last from kindergarten through high school.

Often children return to the general classroom if they can cope with the demands. Physical therapists sometimes visit the schools to treat these special children.

All schools are required by federal law to provide special equipment so that qualified students can be successfully mainstreamed into regular education classrooms.
The primary purpose of the school for the handicapped child is education. It is not primarily a treatment center with the school program added, as is the situation in the convalescent hospital for children. The treatment program in the school is important, but it is definitely secondary to the academic program.

The same basic principles of education that are involved in teaching academic subjects apply to the teaching of a motor activity. Motivation is basic to all treatment, and the treatment must be planned to develop the child's will to improve. The physical therapist must perform testing procedures to evaluate muscle strength and range of motion. Then he or she must develop an exercise program to develop strength, coordination, balance, and Activities of Daily Living (ADL) skills. If you worked in a school, you would also share with the doctor the responsibility of fitting and maintaining the children in braces, artificial limbs, or other special equipment.

Therapists working in children's programs must possess ingenuity and initiative as well as the knowledge of basic physical therapy principles and procedures. They must correlate the technique with the use of equipment and must often adapt the furniture such as chairs, desks, and wheelchairs to fit the needs of specific children. Mechanical aptitude is a great asset here.

Like the teachers in a school, therapists must share in other activities of the school. They attend staff meetings and conferences to interpret the capability and disability of the child in the classroom. Therapists share the philosophy of rehabilitation with the entire school faculty and assist them in the management of the child. Therapists also share in the responsibility for such non-physical therapy duties as fire drills, bus duty, educational trips, and safety programs. Therapists usually serve on the committee to help screen children for admission to the special school and again to recommend transfer of children to regular schools.

Since the effectiveness of the program depends on parental cooperation, a great deal of this work involves parent instruction, demonstration, and conferences to interpret the child's changing needs, and the therapies used to meet them.

In the school programs, the physical therapist is employed by the board of education or the board of health, by a private agency, or by the city as a civil servant. Whatever agency pays the salary, the therapist is entitled to all the benefits and privileges that teachers enjoy annual salary increments, sick leave, retirement benefits, and summer vacations.

In a typical school the therapist treats between 8:30 A.M. and 3:30 P.M., Monday through Friday, from September until June. During these nine months, the therapist shares with the academic faculty of the school the job of watching children grow. Like the teachers of handicapped children, the physical therapist needs a great love for children and enthusiasm and patience. Because the therapists are away from professional colleagues while working in a school environment, they must possess added self-discipline to continue their own professional education.

**INDUSTRIAL CLINICS**

Some large companies have small but well-equipped physical therapy departments in their dispensaries in order to return injured employees to their jobs in the best possible condition and in the shortest possible time following an injury.

Twenty-five percent of these injuries are hand injuries, but many are multiple injuries involving fractures, sprains, strains, dislocations, crush injuries, lacerations, amputations, ruptured muscles and nerves, and weakness resulting from injuries.

The turnover of patients in these industrial clinics is rapid because no chronic conditions are treated and much of the work is preventive. The caseload is heavy; the tempo of the work is fast. The therapist working in industrial clinics must enjoy working largely with men and must be diplomatic, yet able encourage the patient on to harder work. He or she must be able to organize a volume of work well.

Because there are many lawsuits filed by employees following industrial accidents, the industrial therapist must keep detailed and extensive records of progress and make frequent appearances in court.

Ergonomics is a new and rapidly expanding area in industrial medicine.
Approximately ten years ago, the Volvo automobile factory in Sweden became alarmed by the number of industrial related accidents, and began a program to prevent, rather than to treat, injuries. The program was so successful that other nations have copied it.

Therapists involved in this type of program will inspect equipment for the placement, height, comfort, and other parameters, to minimize the workers' strain. The therapist will also conduct classes on body mechanics and often conduct Back Schools, on the company premises.

Ergonomics became the most rapidly expanding specialty in physical therapy in the 1990s because it resulted in a great decrease in injuries and in cost.

**GERIATRICS**

Institutions for the care of the aged are growing, both in size and number. Some older patients cannot return home because of the severity of a stroke or arthritis or the after effects of a fracture. Others cannot return simply because there is no one at home to care for them during the convalescent period after a fracture or operation.

Many older patients receive heat, massage, exercises, walking training, and self-help activities to make them independent. The therapist may administer this treatment directly or teach other members of the hospital or nursing home staff to do this work with the patients.

The pace in a geriatrics center is slower because the patients move slower. They need more time for repetition of movement and more time to talk about their problems. In the geriatric setting, the therapist must stress the psychological aspects of care as much as the actual and physical care. He or she must emphasize the individuality of the patient and must strive constantly to reestablish the patient's self-confidence. The therapist must be on guard not to promise unrealistic goals to the weary older person.

In some of the larger institutions a staff of qualified physical therapists is on hand to treat and to supervise treatments. In many institutions, however, the physical therapist serves as a consultant.

Salaries in the geriatric field tend to be higher than those in general hospital work and in some phases of pediatrics, because this area of treatment and care has less emotional appeal than many others.

Physical therapy departments in rehabilitation centers and curative workshops are similar to those in general hospitals treating a majority of orthopedic and neurological patients. In some centers, the patients live at home and commute by private or public transportation or by agency operated buses. In other centers, the patients are residents at the center.

The actual physical therapy stresses strengthening and stretching exercises, balance, and co-ordination training. In this respect, it is similar to all the other aspects of physical therapy. It differs from hospital work, however, in the amount of contact that the therapist has with the patient's family and the contact with representatives of other agencies in the field of health, education, and welfare. The therapist has less medical supervision, and, therefore, must plan more carefully for the patient's continued treatment program. He or she must also arrange for the patient's return to the doctor at the proper intervals.

Like the therapists in schools, those in rehabilitation centers must make adaptive equipment and must have teaching skill and the ability to motivate the patient to greater challenges and success. The physical therapist must assist the business office in ascertaining the cost of treatment and help the social service staff determine the patient's ability to pay for the services.

In rehabilitation centers, the team approach to treatment is more important than any independent form of treatment. All the services unite to treat the patient as a whole, to restore function, and to aid in psychological adjustment. Many of the disabled who seek treatment in rehabilitation centers have conditions beyond the help of definitive medical care. These patients need a dynamic and co-ordinated program to teach them to live effectively within the limits of their disability, but to the maximum of their capabilities. The rehabilitation process continues until the patient attains the greatest possible degree of independence, not only physically but also socially, mentally, economically, and vocationally.
PRIVATE PRACTICE

Ever since World War I, a few physical therapists have chosen to work in the offices of orthopedists, psychiatrists, and rheumatologists, for a specified salary and guaranteed fringe benefits. A very few others have chosen to be self-employed. During the past two decades, there has been an increasing trend toward physical therapists developing private practices. In some states there had been a movement to force all therapists to be independent and to work in private practice, or in contractual agreements with large institutions and nursing homes, rather than as employees. The reason for this was an attempt to enhance the image of physical therapists as professionals.

Currently two-thirds of physical therapists work in hospitals or office settings. One-third work in home health, outpatient rehabilitation centers, nursing homes, clinics, or are self-employed. Some are part of a consulting group. Most physical therapists in private practice treat patients in a private office. These therapists must pay all their own expenses: rent, electricity, gas, telephone, and so on. They must buy all their own equipment, and they must pay their employees. They must also make arrangements for vacation and sick-leave replacements.

The treatments they give are most frequently whirlpool, hot packs, ultrasound, diathermy, traction, massage, and therapeutic exercise. Most treatments average between thirty and forty-five minutes per patient, and most patients receive three treatments a week. The average private patient receives a total of eleven treatments, but 25 percent require more than fifteen treatments. The physical therapist in private practice works between eight and thirteen hours each day, but ten hours a day is the average. Therapists in private practice treat an average of twenty patients per day. Although the physical therapist in private practice works longer hours, her or his income can be much higher than that of therapists working in hospitals or for agencies and institutions.

A major reason for developing a private practice is the potentially higher income than is possible when working for a hospital, institution, or agency. Private practice also provides for greater freedom in structuring time. Obviously, the financial risk is greater, but so are the rewards of success.

Although this type of physical therapy career is more financially rewarding, it lacks much of the excitement and personal and social contact of a hospital. It lacks the opportunity for participation in medical staff meetings and for the training of students. A physical therapist needs at least three years and preferably five years experience before beginning a private practice. Therapists who leave facilities after a successful experience there and establish a practice in the same area have an easier time than those who organize a practice where they are unknown.

The success of a therapist in private practice depends on many things—the size of the community, the number of doctors, the industrial enterprises, and the number of competing departments in the area. It depends upon the attitude and the interest of local doctors in physical therapy. The ultimate success of a therapist depends, however, on the quality and quantity of his or her work, and on initiative, personality, and sales ability.

Some therapists who are self-employed in private practice have contractual arrangements with small hospitals and nursing homes. These small institutions, with between forty-five and two-hundred beds, cannot afford the expense of a physical therapy department. They therefore arrange for a private therapist to spend a certain number of hours or days each week in evaluating, testing, and developing treatment programs for the patient. The therapist must also teach the nurses, nursing assistants, aides, and orderlies how to perform certain follow-up care.

THE CONSULTANT

Since the Social Security Act of 1965 authorized Medicare, the demand for physical therapists in nursing homes and extended care facilities has far exceeded the supply. To meet the need, physical therapists formed a new group within their field called consultants. Consultants must have a minimum of two years of clinical practice, but most have had longer work experience in a variety of situations, including teaching and supervising.

The consultant must organize the physical therapy department, order equipment, arrange for clinical evaluations, develop treatment programs, outline them in writing, and teach the permanent staff. They make frequent reports to
the referring doctors and to the administration about the department's growth and finances.

In some areas, consultants work out of a central hospital, visiting the surrounding satellite hospitals. Other areas where consultants work today are public health departments, visiting nurse associations, regional health programs, heart programs, and many other agencies.

Some consultants are self-employed and work under contract, but others are on salary. The fee arrangement will vary, depending on the locality and working hours.

HOME HEALTH CARE

A patient who is chronically ill or permanently handicapped sometimes can leave a general hospital earlier and return home if he or she has follow-up physical therapy care at home. Other patients may be able to stay out of hospitals if they can receive physical therapy in their homes. For some patients who cannot walk or who have other physical or emotional handicaps, that make treatment in an ordinary department difficult or impossible, treatment in the home is necessary. A few patients lack transportation, and others must travel so far that the value of the treatment is counteracted by the difficult journey. A partial solution for these patients is treatment in the home.

Changes in Medicare and Private Insurance

The home health care, or domiciliary service, as it is called in the United Kingdom, has changed radically in recent years. Several decades ago when the physical therapist shortage was acute, most physical therapists employed in hospitals moonlighted evenings and weekends, to treat patients requiring ongoing care. When the private practices developed, the self-employed physical therapists included home visits with their services, because the few agencies providing home treatment, such as the Visiting Nurse Association and the Arthritis and Rheumatism Foundation, could not meet the demand.

With the recent revisions in Medicare and the rules now dictated by third-party and private insurance companies, patients are being discharged from hospitals earlier than ever before. As a result, the number of agencies sponsoring home health care programs has multiplied at a very rapid rate.

Some of these agencies are sponsored by large drug manufacturers; others are owned by other private interests. Many large metropolitan hospitals that vowed they would never become involved in home health care are developing programs to provide treatment and to prevent further loss of income. The competition for this patient population is becoming intense. The employment possibilities for this type of treatment are expanding constantly.

A therapist must have an automobile to treat home-bound patients. Although it is possible to use public transportation, it is very impractical. The number of patients a therapist treats will vary with the distance, driving time, and severity.

The physical therapist has an obligation to serve as many people as possible, and one cannot ignore the many for the few. A home-care program is costly in time and productivity by comparison to treatment in a center. For this reason, a home-care program must be a teaching program, limited in time. It continues only long enough for the patient to adapt to the disability and for the family to learn their role in positioning and exercising the patient and adapting the furniture and the house to the patient's needs.

The therapist must decide at the outset upon the best type of treatment for the patient. Does the patient require a dynamic rehabilitation program to improve his or her condition? Is the patient a candidate for maintenance or supportive care an exercise program that will keep the patient in the same place because the condition won't improve but should not become worse? Does the patient need only custodial care to prevent muscles and joints from getting stiff and the skin from breaking down into pressure sores?

After the therapist has decided what type of care the patient needs, it is necessary to instruct the family in the exercise program. If the patient needs a dynamic program, the therapist may bring along portable equipment, such as heat lamps, diathermy machines, ultrasound units, or weights to hasten the recovery period.
In a home-bound program, the physical therapist helps the patient to adapt to her or his disability and live with it. Therapists do more than merely give treatments, because they must help the patient and family solve the problems of the patient. They must establish a rapport with the family, and they are frequently the only continuing contact with the doctor of the patient’s problems. In 1996, the average salary for a physical therapist in home health was $60,000. A few commercial hospitalization policies provide coverage for home health care, but the majority do not.

INSTITUTIONS FOR THE MENTALLY ILL AND MENTALLY RETARDED

The goal of physical therapy in a hospital for the mentally ill is to keep the patient in continued contact with reality. The therapist provides patients with activities that may help them return to society as soon as possible in the best possible condition.

Some patients with schizophrenia suffer from catatonia, a condition of marked muscular rigidity resulting in contractures at the joints. Usually the patients with catatonia assume rigid, unchanging positions for extended periods of time. Physical therapists attempt to keep the joints free and the muscles limber. Many of these patients also develop pressure sores from lack of movement. The therapist attempts to stimulate the patient into changing positions and frequency must treat these pressure areas with various modalities. Other patients develop swollen legs, and the therapist encourages these patients to move and to elevate their legs. In all of these conditions, the therapist treats the patient just as any other patient who did not have mental illness.

Specific treatments help patients overcome the problems that are confining them. Sometimes the patient lies in a sedative tub to relax. Other patients may be encouraged to play water polo to relieve their aggression or their abundance of energy. Another form of physical therapy treatment for the mentally ill patient is the salt glow, a vigorous massage in which salt is used instead of a lubricant to stimulate circulation.

The therapist working in a mental hospital must be gentle, kind, and able to understand the patient. He or she must be able to handle the patients in a firm but just manner. A therapist working in this setting must be sincere because these patients can sense very quickly when a person is indifferent or insincere. Tact, diplomacy, and an understanding of the fears of these patients are prime requisites for this job.

TREATING THE BLIND

Physical therapists play a primary role in the rehabilitation of the blind. Physical therapists do not function alone in this important work, but join with representatives from several other professional groups who work together to increase the independence of the sightless.

The physical therapist is chiefly concerned with teaching the patient an awareness of body image so that the sightless person can identify position in space, can maintain good balance, and can acquire sufficient co-ordination to cope with sudden changes in position while moving in a dark world.

Many sightless people have poor posture, which can result in discomfort or pain because of poor body alignment. The therapist emphasizes the importance of good posture through corrective exercises.

It is only when the blind person has developed spatial perception, good coordination, and balance that he or she can learn to move about and travel independently.

SPORTS MEDICINE

Team sports have become big business. Whether a professional team plays to earn money for the owners or a varsity team plays to enhance their school’s image, all individuals on the team have a serious obligation to fulfill their assignments. The player must be in the best possible condition before the game. If injured during the game, he or she must receive the best treatment possible as quickly as possible to return to active competition.

Injuries are more common among high school and college athletes than among the professionals. The amateur,
who is primarily a student, does not have adequate time to devote to the necessary conditioning before competition and consequently is much more prone to injuries.

Although most accidents occur in football, soccer, and hockey—the more aggressive sports—injuries do occur in baseball and basketball.

Both amateur and professional teams have trainers who assist in the conditioning program but are more concerned with the care of the player following injury. In the past, trainers were former athletes who had acquired a smattering of knowledge about the treatment of trauma and orthopedic injuries.

Today, this trainer is being replaced by a qualified physical therapist who has a good foundation in anatomy and kinesiology and, therefore, is better prepared to supervise the exercise program. More importantly, the physical therapist has more knowledge about treatment techniques following fractures, lacerations, sprains, strains, dislocations, and torn cartilages in the knees than has the retired athlete.

The physical therapist treats the injured player after referral by the team physician or another specialist, just as in a hospital, rehabilitation center, or in a private office.

The pace of life and work is fast. The job is an exciting one because the physical therapist travels with the team to all their engagements. The patients are young, strong, and healthy, so the outlook of the therapist is constantly optimistic. Besides being exciting and fun, the salaries in this specialty are relatively high.

Dance has grown in popularity in recent years, and today people of all ages are studying ballet and modern dance. Dancers can suffer from injuries just as serious as players in competitive sports. In ballet, the dancer assumes positions that stretch muscles and joints far beyond normal limits. Injuries to the feet, ankles, and knees are common. Some of the large dance companies have orthopedists and physical therapists on their staffs to treat the injuries of the ballet dancers.

Modern dance puts less strain on the feet and legs, but the leaps and falls can be hazardous.

A new subcategory of sports medicine or sports therapy is music therapy. Many musicians suffer from sprains and strains in the upper extremities because of the intensive use of the arms while playing instruments. For the lovers of music, this would be a rewarding experience.

Opportunities in sports medicine are exploding. Many physical therapists hold concurrent certificates as athletic trainers, and this enhances the job potential for them. Remember, too, that the Olympic teams also employ physical therapists.

FOREIGN ASSIGNMENTS

If you are blessed or cursed with an incurable wanderlust—become a physical therapist! In every nation of the world there are opportunities to live and work as a physical therapist within the culture of the country and to learn its language, religion, philosophy, and social customs while you work at your job.

If you want work experience in a certain nation, it is possible to obtain reciprocity (permission to work) if the other nation is a member of the World Confederation for Physical Therapy and if the government of that nation permits foreigners to hold salaried positions.

In Europe, where the ratio of physical therapists to the population is much greater than it is in the United States, the salaries of physical therapists are lower. It is also well to remember that the cost of living in most of the European nations is just as high or higher than the cost of living in America.

The greatest need for physical therapists is in Africa, Asia, and South America. Therapists who work on any of these three continents find problems similar to those found at home and others that are very different. Language differences present the greatest problem. In Hindu and Muslim areas, male therapists may not treat female patients, and in some Muslim areas, even foreign women may not examine or treat a Muslim woman’s legs. In all
of the emerging nations, there is a great deal of leprosy, tuberculosis, polio, meningitis, and other diseases (which were rampant in the United States at the turn of the century). There is relatively little work done in cerebral palsy, in geriatrics, or in the treatment of chronic problems.

Foreign assignments are exciting, but they were not created for the opportunist who merely wants to use a work assignment abroad as a springboard to a free world tour. People who request help need the guidance of therapists who are dedicated to physical therapy, their patients, and their employers. The therapists who are chosen must be mature enough and unselfish enough to work long hours, side by side with the nationals, in the heat or the cold, teaching and helping them in a true spirit of humility and good fellowship. American therapists serving abroad should attempt to live as much as possible as the people in the area live and not demand special or unusually luxurious accommodations at the expense of their hosts.

No matter where you go or under whose auspices you work, you will need a passport, visas, and an international health certificate, and it is good to have an international driver's license. You will need to be immunized against typhoid, typhus, tetanus, cholera, malaria, polio, and any other disease afflicting the nation where you will live.

Before you leave the United States, you should take time to study the history, geography, religion, social customs, and, if possible, the language of the nation where you will work.

Living conditions vary. Some organizations will provide you with luxurious accommodations, quite palatial by comparison to the community. Others offer little more than hovels. You may have servants, but you may prefer to care for your own needs.

Most people who have worked in a foreign assignment have at one time, at least, gnashed their teeth in frustration over their inability to effect more rapid change. No matter who sponsored you, you are an unofficial diplomat of the United States. You must therefore hide your irritation and remember that the reason you are there is to help relieve suffering and promote good health, regardless of national or cultural differences.

In January 1956, the World Health Organization awarded official status to the World Confederation for Physical Therapy. This placed on the World Confederation the responsibility of giving WHO technical assistance through consultation and service by providing personnel and demonstrating programs in rehabilitation. WHO also requires that the World Confederation give continuing assistance to these programs after they are started. Therapists selected for the projects are chosen from all member nations on a percentage basis. The International Red Cross has sent physical therapists into several areas, but perhaps one of the most exciting assignments in their history was that of sending European, Australian, and American therapists to Morocco in 1960, when thousands of people became paralyzed after consuming contaminated cooking oil. The therapists screened the patients, tested them, and taught Moroccan assistants how to exercise them.

TEACHING

There have been many changes in physical therapy education during the past thirty years. The earlier schools were attached to hospitals, and the instructors were usually part of the hospital physical therapy staff who taught techniques after the doctors laid the foundation in anatomy, physiology, and medical lectures.

The university program today has brought a sharp differentiation between the role of the teacher in the academic institution and the role of the practicing clinician. In the physical therapy schools today, all faculty members must have a master's degree, and a doctorate is necessary for school directors.

The emphasis today is on the why of physical therapy, rather than on the how of four or five decades ago. The teachers planning the curricula must provide each student with opportunities to obtain a broad knowledge of anatomy, physiology, pathology, kinesiology, neurology, orthopedics, and medical principles, as well as proficiency in physical therapy techniques. The university faculty of today accept as a part of its responsibility research in the field. Teachers must be constantly concerned with changes in the profession and must anticipate the needs of the future and adjust the curriculum to meet the demands.

There are two types of faculty members. One is the academic, full-time faculty member who teaches classroom
subjects and is paid a salary by the university according to his or her position.

The other type of faculty member is called "clinical faculty member." These physical therapists work with students in the practical application of their knowledge. At various periods during the academic course and at the completion of it, the academic faculty arranges for the students to spend time in approved clinical settings, where well qualified physical therapists observe, teach, and critique the students. Clinical faculty members rarely receive compensation other than the privilege of taking one free course each semester.

Opportunities in physical therapy education are exciting; the responsibilities, however, can be burdensome, but the educational process is fascinating. To be a part of this process can be stimulating and challenging, and observing its result can hold many rewards.

RESEARCH AND WRITING

The rate of growth in any profession depends upon the amount of information that research contributes to the profession. Physical therapy began as a service to patients, not as a body of knowledge. Research came later and grew up on the fringe of the practice of physical therapy.

Today, both in the academic halls and in busy clinics, therapists consider the how, the where, the why, and the when of the treatments that they have given for so many years. This systematic investigation of physical therapy is long overdue. Physical therapists must clarify what needs to be known and thus better prepare students for more extensive research in both science and in practice.

The physical therapist in research must co-operate with all the members of the rehabilitation team, but therapists must no longer rely upon other related bodies of learning to supply their knowledge. Specific research problems of physical therapy as distinct from other areas such as nursing, psychology, and orthopedics, are now receiving professional, focused, research attention. Those who wish to learn how to research must enroll in proper courses in the large universities and join forces with the established investigators so they may learn and employ the necessary skills.

Writing the results of research is important because it informs others of the results. Physical therapists must reevaluate old material in the light of new knowledge and experience, read widely, and study the current literature carefully. They must report even minor tips in the practice of physical therapy that might help their fellow workers. They should report illustrative cases.

In short, in both research and writing, a physical therapist must give old ideas a new examination, and work steadily toward the growth of the body of physical therapy research literature needed today.