

(بَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا

الْعِلْمَ دَرَجَاتٍ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ)

صدق الله العظيم سورة المجادلة (أية11)



Introduction of Physical Therapy for Occupational and Environmental health and diseases

Dr / Ragaee Saeed Mahmoud
Lecturer of physical therapy
South Valley University

What is Occupational and Environmental Physiotherapy (OEPT):

It started as an idea that surrounded a new field of physiotherapy, where key aspects of the relationship between the occupational, environment, human health and functioning and physiotherapy are considered and respected to mutually benefit of patient health. OEPT covers areas of clinical practice, research and education, and bridges the various clinical specialties within physiotherapy.

Occupational Health:

It is defined as a multidisciplinary activity aimed at the protection and promotion of the health of workers. It depends on an individual's physical, mental, and social well-being, general health, and personal development.

Environmental Health:

It is defined as full range of functional capacities across the lifespan, allowing people to enter into satisfying relationships with others, to work. It is consistent with the beliefs of professions that supports functional activities and engagement in productivity and satisfying life.

Essential steps may guide the process that makes occupational and environmental friendly to physiotherapy practice:

Step 1: Understanding the relationship between health and the occupation and environment.

Step 2: Identifying the aspects of the physiotherapy practice that need to change according to the human functioning.

Step 3: Needing to make a change based on new knowledge between physiotherapist and human health.

Step 4: Expanding on the new field of physiotherapy, and allowing other fields to do the same.

Physical therapists (PTs) play a vital role in delivery of occupational and environmental health services because they focus on optimizing movement to promote activity-participation that influences sustained worker productivity. PTs are professionals who examine, evaluate, and diagnose movement impairments, and prescribe safe therapeutic interventions for individuals of all ages to:

- Improve ability to move functionally.
- Reduce or manage pain.
- Facilitate job or lifestyle accommodations.
- Decrease disability.

There are systems can be used to improve OEPT:

- <u>Designing the worker-interface</u>: to make it easier to use and more resistant to daily life errors that people are known to make.
- <u>Changing the work environment:</u> to make it safer and more appropriate for the task.
- <u>Changing the task:</u> to make it more compatible with the worker characteristics.
- Changing the way work is organized: to accommodate people's psychological, and social needs.

Occupational and environmental diseases frequently considered as routine medical disorders. There were **steps** that can be used by the practicing physiotherapist for detecting occupational and environmental diseases or problems:

- (Step 1): Routine screening questions for all patients (List of job description).
- (Step 2): Consideration of sources of working exposure (workplace or home surroundings).
- (Step 3): Identification and handling of the hazardous agents that may affect functional activities.
- (Step 4): Follow-up, consultation, and resolution of any problems.

Role of physical therapist in environmental health:

- Do a physical evaluation of an injury or condition to better understand how it is restricting every day activities.
- Develop a treatment plan that involves exercise, ice or heat, elevation, and compression.
- Do exercises and learn the human how to do exercises that may reduce pain, increase strength, and improve mobility.
- Develop a program to help improve overall fitness, which can help with injury prevention
- Offer hands-on physical therapy modalities such as electric stimulation, therapeutic massage, myofascial release, and trigger point therapy.

Role of physical therapist in occupational health:

- Evaluate human needs by meeting with them in their homes, offices, schools, or communities.
- Recommend assistive devices that can make it easier to do necessary ADL and teach them how to use the devices.
- Learn old humans to do personal care activities in a manner that's safe and less likely to lead to injury.
- Work with them to solve cognitive problems, memory loss, and behavioral problems they may have.
- Offer advices for environmental modification.

Facilitate safety and healthy work occupation and environments for physical therapists by:

- Raising awareness of occupational hazards and associated risks that may be suitable to their practice.
- Raising physical therapists' awareness of appropriate controls and risk management practices.
- Advocating for physical therapists' access to operational controls for occupational health and safety risks including.
- Safe systems of work, appropriate staffing levels and conditions.
- Appropriate injury/illness reporting systems.

Occupational and environmental medicine focuses on:

- Interactions between work and health, and physical therapist.
- Understanding how to prevent, evaluate, and manage adverse health effects from work and environmental hazards.
- Experience about the impact of health conditions on work.
- Preventing illness related to a hazards exposure, treating injury due to human health condition.
- Interaction with a wide range of other team professionals.
- Provide guidance not only to patients but also to other clinicians and occupational health.

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