

PHYSIOTHERAPY FOR HEALTH AND WELL-BEING



FACULTY OF GENERAL & ADAPTED PHYSICAL EDUCATION AND YOGA

Ramakrishna Mission Vivekananda Educational and Research Institute

(Deemed-to-be-University as declared by Govt. of India under Section 3 of UGC Act, 1956)







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PHYSIOTHERAPY FOR HEALTH AND WELL-BEING

Duration: 48 Hours

S. No	Topic	Total Hours	Theory	Practical
1	BASIC STRETCHES: Stretches for Upper Limb Muscles, Lower Limb Muscles, Neck Muscles, Abdominal Muscles, Upper Back & Lower Back Muscles	10 HOURS	3	962
2	ISSUES OF NECK & UPPER LIMB: Shoulder: Periarthritis, Bicipital Tendinitis, Sub acromial Bursitis – Basic Exercises, Elbow: Tennis & Golfers Elbow – Basic Exercises, Wrist: Ulnar disc pain – Basic Exercises, Neck: Cervical Spondylosis – Basic Exercises	12 HOÙRS	4	8
3	ISSUES OF BACK & LOWER LIMB: Hip - Gluteal Pain, ITB Pain - Basic Exercises, Knee - Osteoarthritis, Medial & Lateral Ligament Pain - ACL/PCL pain - Basic Exercises, Ankle - Heel pain, medial & lateral ligament pain - Basic Exercises, Back - Lower Back Pain - Sciatica - Basic Exercises	12 HOURS	4	8
4	Heart Issues - Cardio Pulmonary Resuscitation - Angioplasty - Basic Exercises, Basic Diagnostic Tools (Orientation) - Normal values Basic First Aid kit & its application	10 HOURS	3	7
5	Supportive and Aiding equipment for the health issues (Bands, Straps, Splints)	04 HOURS	1	3
	TOTAL	48	15	33

References:

Sharon Elayne Fair, *Physical Medicine and Rehabilitation Pocketpedia* 4th Edition, ISBN 978-0826156273, Demos Medical, 2023

Marlis Gonzalez-Fernandez, Stephen Schaaf, Handbook of Physical Medicine and Rehabilitation 1st Edition, ISBN 978-0826162250, Demos Medical, September 8, 2021

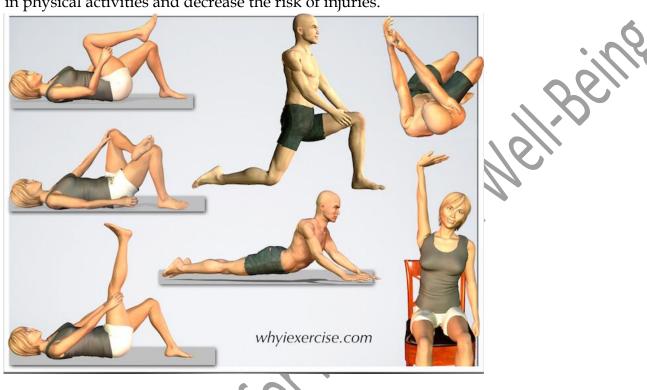
Sharon Elayne Fair, Wellness and Physical Therapy (Contemporary Issues in Physical Therapy and Rehabilitation Medicine) 1st Edition, ISBN 978-0763758219, Jones & Bartlett Learning, 2009

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Basic Stretches:

Research has shown that stretching can help improve flexibility, and, as a result, the range of motion of the joints also improves. Better flexibility will also improve the performance in physical activities and decrease the risk of injuries.





Periarthritis: or an Idiopathic restriction of shoulder movement is the inflammatory condition causes fibrosis of the GH joint capsule, and is accompanied by gradually progressive stiffness and significant restriction of range of motion (typically external rotation).

Biceps Tendinitis:

Biceps tendinitis is an inflammation or irritation of the upper biceps tendon. Also called the long head of the biceps tendon, this strong, cord-like structure connects the biceps muscle to the bone in the shoulder socket.

Pain in the front of the shoulder and weakness are common symptoms of biceps tendinitis. They can often be relieved with rest, medication and graded exercises. In severe cases, it needs surgery to repair the tendon.

Sub-acromial bursitis:

Sub-acromial bursitis is a common etiology of shoulder pain. It results from inflammation of the bursa, a sac of tissue present under the acromion process of the shoulder. It is usually brought about by repetitive overhead activities or trauma.

Tennis elbow:

Tennis elbow (lateral epicondylitis) is a painful condition that occurs when tendons in the elbow are overloaded, usually by repetitive motions of the wrist and arm.

Golfer's elbow:

Golfer's elbow is a condition that causes pain where the tendons of the forearm muscles attach to the bony bump on the inside of the elbow. The pain might spread into the forearm and wrist. Golfer's elbow is similar to tennis elbow, which occurs on the outside of the elbow.

Ulnar Disc Pain:

The triangular fibrocartilage complex (TFCC) is a load-bearing structure between the lunate, triquetrum, and ulnar head. The function of the TFCC is to act as a stabilizer for the ulnar aspect of the wrist. The TFCC is at risk for either acute or chronic degenerative injury. Forced ulnar deviation and positive ulnar variation carry associations with injuries to the TFCC.

Cervical Spondylosis:

Cervical spondylosis is a general term for age-related wear and tear affecting the spinal disc of the neck. As the discs dehydrate and shrink, signs of osteoarthritis develop, including bony projections along the edges of bones (bone spurs). This may lead to the reduction of disc thickness and impingement of nerves too in severe conditions and result in pain and numbness along the course of the nerve.

Gluteal Pain:

Gluteal Pain Syndrome (DGS) is defined as pain or numbness in the buttock, the hip, or the posterior thigh with radiation or radicular pain in the Sciatic nerve distribution. This condition is characterized by being: Non-discogenic. A Sciatic nerve disorder. It can also be associated with gluteus medius, gluteus minimus, and tensor fasciae latae (TFL).

Iliotibial band syndrome:

Iliotibial band syndrome is where a tendon called the iliotibial band gets irritated or swollen from rubbing against the hip or knee bones. The tendon is on the outside of the leg, and it goes from the top of the pelvic bone down to the knee. It rubs against the bones when it gets too tense (tight). There are many reasons why the iliotibial band might tighten. The main symptom is pain between the hip and knees that worsens with activity. Treatments such as physiotherapy and sometimes corticosteroid injections may help.

Osteoarthritis:

Osteoarthritis is the most common form of arthritis, affecting millions of people worldwide. It occurs when the protective cartilage that cushions the ends of the bones wears down over time. Although osteoarthritis can damage any joint, the disorder most commonly affects joints in your hands, knees, hips and spine.

A type of arthritis that occurs when flexible tissue at the ends of bones wears down. The wearing down of the protective tissue at the ends of bones (cartilage) occurs gradually and worsens over time. Joint pain in the hands, neck, lower back, knees or hips is the most common symptom. Medication, physiotherapy and sometimes surgery can help reduce pain and maintain joint movement.

Collateral Ligament Injuries:

Knee ligament sprains or tears are a common sports injury. The knee ligaments connect the thighbone to lower leg bones. The medial collateral ligament (MCL) and lateral collateral ligament (LCL) are found on the sides of the knee. Athletes who participate in direct contact sports like football or soccer are more likely to injure their collateral ligaments.

- The medial collateral ligament (MCL) is on the inside. It connects the femur to the tibia.
- The lateral collateral ligament (LCL) is on the outside. It connects the femur to the fibula (the smaller bone in the lower leg).

Grade 1 Sprains. The ligament is mildly damaged in a Grade 1 sprain. It has been slightly stretched but is still able to help keep the knee joint stable.

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Grade 2 Sprains. A Grade 2 sprain stretches the ligament to the point where it becomes loose. This is often referred to as a partial tear of the ligament.

Grade 3 Sprains. This type of sprain is most commonly referred to as a complete tear of the ligament. The ligament has been torn in half or pulled directly off the bone, and the knee joint is unstable.

Cruciate Ligaments:

These are found inside the knee joint. They cross each other to form an *X*, with the anterior cruciate ligament (ACL) in front and the posterior cruciate ligament (PCL) in back. The cruciate ligaments control the front and back motion of the knee.

The anterior cruciate ligament runs diagonally in the middle of the knee. It prevents the tibia from sliding out in front of the femur and provides rotational stability to the knee.

The PCL keeps the shinbone from moving backward too far. It is stronger than the ACL and is injured far less often.

The anterior cruciate ligament can be injured in several ways:

- Changing direction rapidly
- Stopping suddenly
- Slowing down while running
- Landing from a jump incorrectly
- Direct contact or collision, such as a football tackle

Heel Pain:

The most common causes of heel pain are plantar fasciitis, which affects the bottom of the heel, and Achilles tendinitis, which affects the back of the heel.

Achilles Tendinitis: This is the inflammation of the Achilles tendon. Achilles Tendinitis occurs commonly in people who have active lifestyles, such as people who are joggers, runners or even dancers.

People who have long standing jobs are also associated with heel pain.

Supporting and aiding techniques: Upper limb, lower limb, upper back, lower back and abdomen.

- 1. Positional Supports
- 2. Soft Supports
- 3. Fracture Orthosis
- 4. Ankle Supports
- 5. Ankle-Foot Orthoses (AFOs)
- 6. Lower Extremity Walker Boots
- 7. Lower Extremity Soft Supports
- 8. Functional Knee Orthosis
- 9. Knee Immobilizer
- 10. Knee Ankle Foot Orthoses (KAFOs)
- 11. Lower Extremity Fracture Orthoses or Distal Tibia/Fibular Fracture Orthosis
- 12. Reciprocating Gait Orthoses (RGO's)
- 13. Hip Abduction Orthosis
- 14. Sequential Compression Therapy
- 15. Compression Stockings
- 16. Shoulder brace
- 17. Shoulder Immobilizer
- 18. Arm Sling
- 19. Splints
- 20. Exoforms









