

### **COURSE OVERVIEW**

The "Pelvic Floor – Exercise, Sport and Musculoskeletal Dysfunction" course is an Advanced Pelvic Floor course aimed at physiotherapists who already have a solid foundation in the anatomy and pathophysiology underpinning pelvic floor disorders, as well as assessment and management of prolapse and incontinence.

#### Day 1 PELVIC FLOOR, EXERCISE and SPORT

The first day of the course is split into two components, each focusing on a different subset of the female population

### **DAY 1: MORNING SESSION**

Adult / Parous Females with PF Dysfunction How to give advice regarding exercise and sport to the adult female with pelvic floor dysfunction.

### DAY 1: AFTERNOON SESSION

<u>The Nulliparous Female Elite Athlete</u> Implications of high impact sport on the pelvic floor. Risk factors, long term implications, when to intervene.

### Morning Session:

- Review of Advanced Anatomy related to Pelvic Organ Prolapse
- Impact of BMI on Prolapse the "BMI vs Exercise vs Pelvic Floor Strain" dilemma.
- Levator Hiatus Assessments and determination of Prolapse risk when exercising
- The 'Pelvic Floor Function : Exercise Risk' Matrix (high / low risk women vs high/low risk exercise)
- The Pelvic Floor First Campaign implications for physiotherapists
- High Risk vs Low Risk Exercise what does the research say?
  - o How does intra-abdominal pressure change with various exercises
  - How does intra-vaginal pressure change with various exercise
  - Abdominal Exercises (crunches, sit-ups vs hydraulic abdominals)
  - Free-Weights implications of alterations in posture (supine, sitting, standing)
  - High Impact Exercise walking vs running vs jumping
- "Stop-Gap" options the role of vaginal support devices to allow the female with pelvic floor dysfunction to continue exercising.

### Afternoon Session:

- Overview of advanced Anatomy concepts in Stress Urinary Incontinence Urethral Hypermobility vs ISD
- Rates of Urinary Incontinence in Young Nulliparous Elite Athletes
- Pelvic Floor Muscle Function in Nulliparous Athletes
  - o Muscle Strength
  - Levator Hiatus
  - o Distensibility
- Identifying Athletes at risk of long term UI and PF Dysfunction during sport and normal ADL's
- Pre-Menarche vs Post-Menarche the implication of fascial softening in high impact sports

ADVANCED PELVIC FLOOR -

#### Day 2 RELATIONSHIP BETWEEN PELVIC FLOOR AND MUSCULOSKELETAL DYSFUNCTION

The second day of the course is designed to assist physiotherapists understand possible links between musculoskeletal and pelvic floor dysfunction.

These topics are not taught separately, rather the concept of "The Chicken or the Egg" is used to understand the cyclical nature and exacerbation of symptoms people can experience when they have both musculoskeletal and pelvic floor dysfunction.

# TOPIC ONE

Pelvic Floor Dysfunction leading to Musculoskeletal Symptoms TOPIC TWO

Musculoskeletal Disorders leading to Lower Urinary Tract, Pelvic Floor and Genital Symptoms

## **Topic One:**

- The relationship between urinary incontinence and back pain what does the research say?
- Review of Form and Force Closure theories of the Pelvic Girdle
- The Role of the Pelvic Floor Musculature in Pelvic Stability
- Alteration in Pelvic Floor Muscle Function in Pelvic Girdle Pain. Implications of:
  - Alteration in strength
    - o Co-Ordination
  - Hypertonicity / overactivity
  - Pelvic Organ Prolapse and Back Pain
    - Stage 1 Prolapse Tension on Uterosacral Ligaments?
    - Sacrocolpopexy Implication of Mesh attached to sacral base
    - Sacrospinous Colpopexy and buttock pain
- Stress Urinary Incontinence Procedures
  - Trans-Obturator Tapes and Groin Pain
    - o Implication of PF Avulsion on pelvic stability

### **Topic Two:**

- Nerve Pathways to the Pelvic Floor the course of the Pudendal nerve
  - Implications of Musculoskeletal Clamps on the Pudendal Nerve
    - Piriformis / Coccygeus Clamp
    - Sacrospinous / Sacrotuberous Clamp
    - Alcock's Canal
- Thoracolumbar Spine relevance to the Lower Urinary Tract and Genito-femoral Region
  - Sympathetic Hypogastric Nerve to Detrusor and Urethra (T10-L2)
  - Genitofemoral Nerve to Labia Majora and Groin (L1,2)
- Obturator Internus the Pelvic Floor / Musculoskeletal Link??
  - o Implications on the Hip Joint and the Pudendal Nerve