

International Continence Society supported pelvic physiotherapy education guideline

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International Continence Society supported pelvic - physiotherapy education guideline

Aim: To outline a guideline of desired knowledge, clinical skills and education levels in Pelvic Physiotherapy (PT). Physiotherapy (PT) involves “using knowledge and skills unique to physiotherapists” and, “is the service only provided by, or under the direction and supervision of a physiotherapist”. (1)

Methods: The PT Committee, within the body of the International Continence Society (ICS), collected information regarding existing educational levels for pelvic floor PT.

Through face to face and on on-line discussion consensus was reached which was summarized in three progressive educational levels based on knowledge and skills and brought together in a guideline. The guideline was submitted to all physiotherapists and the Educational Committee of the ICS, and after approval, submitted to the Executive Board of the ICS.

Result: The guideline lists, in a progressive way, knowledge areas and skills to be achieved by education. It is broad and allows for individual interpretation based on local situations regarding education and healthcare possibilities. It is intended to be dynamic and updated on a regular basis.

Conclusion: The proposed Pelvic PT education guideline is a dynamic document that allows course creators to plan topics for continuing course work and to recognise educational level of a therapist in the field of Pelvic PT. This education guideline can be used to set minimum worldwide standards resulting in higher skill levels for local pelvic physiotherapists and thereby better patient care outcome.

Introduction.

According to the World Confederation for Physical Therapy (WCPT) [2] curriculum guidelines for entry-level physiotherapists varies worldwide. Some countries, with a well-established, recognised and regulated profession, already provide quality instruction in PT entry-level education, however, this is not universal. The WCPT therefore encourages all educators, in all countries to strive for excellence in education and training of physiotherapists in order to promote the development of the profession.

This variance in education is also observed in the field of Pelvic PT, which results in a great variety of skills and competencies. These differences in education make it very difficult for educators, and course creators, for example the Educational Committee of the ICS, to plan topics for continuing course work in the field.

It was therefore necessary to establish an educational guideline, based on the principles of evidence based practice. This guideline can help organizations and governing bodies to set adequate educational standards resulting in higher skill level for all Pelvic physiotherapists. The ICS seeks to be the leader in continence care, and the PT Committee of the ICS has collected the resources to propose such a standard educational guideline for Pelvic PT.

As it is well known that skill acquisition, and eventually competence occur in stages over time. The ICS PT Committee proposes three educational levels in Pelvic PT, representing this progression of knowledge and skills.

Summary of three level pelvic PT education

Level one - evaluation and treatment of simple underactive pelvic floor muscle (PFM) and all pelvic biomechanical dysfunction, vaginal examination of PFM

Level two - in addition to level one skills, evaluation and treatment of hypertonic PFM and pelvic pain and the use of electrical stimulation, manometry and biofeedback in the treatment of PFM dysfunction, rectal examination of PFM

Level three - evaluation and treatment of all PFM dysfunction in all populations including sexual dysfunction and the treatment of children, the elderly, and patient with neurological pathologies.

It is anticipated that different countries will use this educational guideline to varying extents dependent on their needs. While some aspects of this guideline may already be implemented, other aspects may include elements to which countries are striving to fulfil. It is the view of the ICS PT Committee that all countries should be striving towards fulfilling the skills described in this guideline.

Methods.

In 2009 the Educational subcommittee of the PT Committee within the body of the ICS, initiated the project of developing such a guideline. The subcommittee comprised members who were highly experienced pelvic floor physiotherapists with a special interest in the clinical and/or research and/or educational area of Pelvic PT all over the world.

The subcommittee communicated by email, teleconference and discussions during the annual meetings of the ICS. Firstly, the group researched available information defining skills in Pelvic PT. Very little information was available. (3, 4, 5) Authors from the US, Australia and Belgium used information from their respective countries. These authors have experience in curriculum development at the university and certificate course level. They worked collaboratively on an initial draft comparing competency profiles in different countries.

This working draft was proposed to the members of the PT Committee for comments. After implementation of the comments, the second working draft was again submitted for restructure and comments via the ICS website for approval by the members of the PT Committee. After several updates it was finally approved during the annual ICS congress in December 2014 and submitted to external experts. The comments of the external experts were submitted to the PT committee and where approved, and implemented in the document. The 3rd working draft was submitted via the PT representative to the Educational committee of the ICS and to the president of the International Organization of PT in Women's Health of the WCPT at the annual ICS meeting of 2014 in Rio de Janeiro.

Using feedback from the WCPT a 4th working draft was posted for comments by all members of the ICS on the ICS website and a peer review meeting was held at the annual ICS meeting in Montreal in 2015.

The resulting Pelvic PT Education Guideline was concluded following an interactive process and finally approved by the ICS Executive Board. It lists skills and knowledge areas – not

educational topics – to be achieved by education. It is based on three educational levels in Pelvic PT, representing the progression of knowledge and skills in this area.

These guideline was written based on the terminology of the International Classification of Functioning, Disability and Health (6).

To facilitate the lecture and the use of this document, the three levels are described in an identical way :

- A. Final expected skills at the concerned level
- B. Physiotherapeutical reasoning, decision taking and acting
 - 1. Collect data
 - 2. Interpretation of data
 - 3. Plan short and long term objectives
 - 4. Intervention
 - 5. Evaluation
- C. Knowledge areas needed to achieve the expected skills

Discussion

The ICS PT Committee encourages all countries to strive to offer the full range of Pelvic PT education and training as outlined in this document. We recognize this may take time and in some situations will not be possible. For example, in some countries, entry-level PT education will cover the skills and knowledge listed in level one of this guideline. Other countries will need to add significant post graduate course work to reach level one. Each country will determine the amount of education required to meet these levels. All education adds value and enhances treatment possibilities. The ICS PT Committee encourages all Pelvic physiotherapists to adopt a pattern of lifelong learning and seek professional development and learning opportunities to increase, knowledge, skill and clinical expertise.

This guideline lists skills and knowledge areas – not educational topics. PT educators are encouraged to use this list to create appropriate course work based on their own particular situation. The ICS PT Committee wants to assist educators in defining goals for Pelvic PT education and Pelvic physiotherapists in acquiring the relevant skills and knowledge. The Pelvic PT Education Guideline is broad and allows for individual interpretation.

The ICS PT Committee suggests inclusion of some form of competency testing, to be determined by the organization providing the course work. In addition, we suggest the training occurs with periods of mentored or self-directed clinical practice over time. Advancement in clinical expertise and clinical decision making can be increased by deliberate study and discussion with other expert professionals.

This document is intended to be dynamic and will be updated on a regular basis. Summarizing the goals of the guideline:

1. Provide a guideline for educators creating learning programs. Educators and course creators can use the skill list to plan topics for continuing course work in the field of Pelvic PT
2. Recognition of education level. To recognize the educational level of a therapist in the field of Pelvic PT
3. Provide a guideline to encourage official instances to set educational goals

Limitations:

This guideline is based on extensive consensus discussions by a network of pelvic physiotherapists within the ICS and was reviewed by the WCPT Women's Health Organization. These authors have some experience teaching in developing countries and worked to include possible limitations that might be found in countries without well established PT education or Pelvic PT expert resources. However there was a lack of input from developing countries due to absence of members from those countries within the PT committee. So, it is possible that level one is already too high for some countries.

Formal discussion with physiotherapists in these countries should be included in the future. In addition, more organizations worldwide should be given an opportunity to comment on this guideline. The PT Committee of the ICS has recently undertaken the task of collecting information about topics and techniques currently being taught in university courses around the world on Pelvic PT. This will help to refine this guideline.

Physiotherapy education is not standardized in every country and it is unrealistic to expect all countries to reach the same level of expertises in Pelvic PT. The three levels are not based on existing documents but are a proposal. The authors are not aiming for a well established standardized document but they are giving local educators the possibility to use the guideline to help them to develop their own education programs according to their system. This will not lead to standardized levels or programs. As the guideline becomes more refined, the PT committee of the ICS could develop tools to allow an organization to know if their program meets the criteria of these guidelines.

Future actions would include circulating the document to:

- Other organizations (IUGA, WCPT, IOPTWH, AUGS)
- PT educators worldwide
- Governing bodies to encourage the settings of local educational standards
- Pelvic PTs in developing countries

Conclusion

The proposed Pelvic PT education guideline is a dynamic document that allows course creators to plan topics for continuing course work and to recognise educational level of a therapist in the field of Pelvic PT. These guidelines are intended to stimulate educators in the establishment of educational programs worldwide and to encourage educators to set educational goals. The document can be used to set minimum worldwide standards resulting in higher skill levels for local pelvic physiotherapists and thereby better patient care outcome.

PELVIC PHYSIOTHERAPIST LEVEL 1

A level 1 Pelvic physiotherapist would be expected to:

- Recognize the symptoms and signs of pelvic floor dysfunctions related to underactive PFM such as stress urinary incontinence (SUI), overactive bladder (OAB), pelvic organ prolapse (POP), and thoraco-lumbo-pelvic disorders linked to the symptoms of the above PF dysfunctions, as well as symptoms and signs of constipation
- Recognize the contra-indications for an internal digital palpation examination and treatment.
- Complete a basic digital vaginal palpation examination and treat patients with SUI, OAB and POP.
- Recognize the need to refer to a more skilled pelvic physiotherapist or other specialist.

1. C = collect data

- a. **R** = relate medication influence, obstetrical-, surgical- and medical history. Consider the impact of psychosocial issues.
- b. **O** = observation: consider musculo-skeletal influence on the thoraco-lumbo-pelvic region, and skin condition
- c. **M** = measure through validated muscle performance: digital PFM palpation examination (vaginal), PFM reflex testing, bladder / bowel diary and recognize dysfunctions of PFM (weakness, tension, pelvic floor muscle injury)

2. I = Interpretation of the data and establishment of a physiotherapeutic diagnosis using highly developed clinical reasoning skills which includes the nature and the extent/severity of the health problem. Determine which components can be treated by a physiotherapist. Take into account local and general interfering factors on the emergence and persistence of the health-problem according to the ICF Body Functions, Body Structures and Impairments in these. Activity, Participation, Activity Limitations and Participation Restrictions. Recognize the need for referral to other more skilled pelvic physiotherapist or other specialist.

1. P = Plan, and agree with the patient, objectives for short and long term goals. Create an individual management plan and determine which lifestyle behaviours and musculo-skeletal dysfunctions should be addressed first. Include assessment of patient's prognosis.

3. I = Intervention, choose the optimal evidence-based techniques and the tools to be used and treat within educational level

- a. Coordination and communication – with patients, their partners and/or parents or guardians, other health and medical professionals.
- b. Patient related instructions for underactive PFM and OAB

- c. Procedural interventions – strengthen PFM, teach co-ordination of muscles and breathing for example during coughing and bladder training techniques for OAB and SUI, including advice on constipation.
- d. Understand and apply basic rules of hygiene during assessment and treatment, for both the patient and the therapist.
- e. Complete an informed consent if available and appropriate according to the local law.

5. E = Evaluation : Outcomes assessment – use of appropriate evidence-based tools

PELVIC PHYSIOTHERAPIST LEVEL 1

Knowledge areas

- Foundation sciences
 - Basic knowledge of anatomy and neurophysiology of the thoraco-lumbo-pelvic region
 - Basic knowledge of biomechanics of the thoraco-lumbo-pelvic region
 - Basic knowledge of anatomy and neurophysiology of the kidneys, the bladder, and the bowel
 - Critical appraisal, clinical reasoning, and understanding of scientific methodology
- Behavioral Sciences
 - Theory and practice of behavior change, motivation and adherence
 - Ethical consideration: awareness of the potential emotional/sexual tensions between therapist and client. The Pelvic physiotherapist keeps clear of the boundaries of this area of tension and respects the patient in this regard. In view of the intimacy and the physical and emotional sensitivity of the abdominal/pelvic area, the attitude should be one of particular insight, attention and care. Complete an informed consent if available and appropriate according to the local laws.
 - Cultural and ethnical considerations: awareness of potential consequences on investigation and treatment modalities due to cultural and ethnical differences
- Clinical Sciences – basic knowledge of pathophysiology, clinical signs, symptoms, etiology, manifestation of conditions related to pelvic floor dysfunctions treated by Pelvic physiotherapists
 - All PFM dysfunction
 - Musculoskeletal disorders associated with urological and gynecological conditions – disorders of the thoraco-lumbo-pelvic region, including respiration
 - Recognize dermatological conditions that need referral
 - Basic knowledge of pharmacological treatments

PELVIC PHYSIOTHERAPIST LEVEL 2

A level 2 pelvic physiotherapist would be expected to:

- Recognize the signs and symptoms of PFM dysfunctions such as SUI, OAB, POP, outlet constipation and pelvic pain (associated with conditions pelvic physiotherapists can treat) related to underactive and overactive PFM, and all thoraco-lumbo-pelvic disorders

- Recognize the contra-indications for an internal digital palpation examination and treatment
- Complete an examination (including digital rectal examination of the PFM) and treat patients with uncomplicated PFM dysfunctions associated with SUI, OAB, POP, outlet constipation, and simple pelvic pain related to overactive PFM.
- Understand the use of adjunctive therapies such as electrical stimulation, manometry and biofeedback devices.
- Recognize the need to refer to a more skilled pelvic physiotherapist or other specialist

1. **C** = collect data

- R** = relate medication influence, obstetrical-, surgical- and medical history. Consider the impact of psychosocial issues.
- O** = observation : consider musculo-skeletal influence on the thoraco-lumbo-pelvic region, and skin conditions.
- M** = measure through validated tests motor function and muscle performance: vaginal and rectal digital PFM palpation examination, PFM reflex testing, soft tissue assessment of the PFM (myofascial mobility, trigger points) and recognize dysfunctions of PFM (weakness, tension, pelvic floor muscle injury). Measure vaginal and rectal pressures and electromyographic (EMG) signals. For voiding / defecation dysfunctions use validated bladder /bowel diary. Assess posture, joint integrity in relation to the pelvis and pain (VAS).

2. **I** = Interpretation of the data and establishment of a physiotherapeutic diagnosis using highly developed clinical reasoning skills which includes the nature and the extent/severity of the health problem. Determine which components can be treated by a physiotherapist. Take into account local and general interfering factors on the emergence and persistence of the health-problem according to the ICF Body Functions, Body Structures and Impairments in these. Activity, Participation, Activity Limitations and Participation Restrictions. Recognize the need for referral to other more skilled pelvic physiotherapist or other specialist.

3. **P** = Plan, and agree with the patient, objectives for short and long term goals. Create an individual management plan and determine which lifestyle behaviours and musculo-skeletal dysfunctions should be addressed first. Include assessment of patient's prognosis.

4. **I** = Intervention, choose the optimal evidence-based techniques and the tools to be used and treat within educational level.

- Coordination and communication – with patients, their partners and/or parents or guardians, other health and medical professionals.
- Patient related instructions – including wellness, bladder training, PFM training, lifestyle modifications, and instruction in sexual matters

- c. Procedural interventions - strengthen or release the PFM. teach co-ordination of muscles and breathing for example during coughing and bladder training techniques for OAB and SUI, including advice on constipation – therapeutic exercises, body mechanics, postural stabilization, relaxation strategies, co-ordination training, neuromuscular re-education, activities of daily living, manual therapy (myofascial release of PFM, scars, etc), electrical therapy, biofeedback, thermal modalities (heat, cold), ultrasound, and dilators
- d. Understand and apply basic rules of hygiene during assessment and treatment, for both the patient and the therapist.
- e. Complete an informed consent if available and appropriate according to the local law.

5. **E** = Evaluation : Outcomes assessment – use of appropriate evidence-based tools

PELVIC PHYSIOTHERAPIST LEVEL 2

Knowledge areas

- Foundation sciences
 - Anatomy and neurophysiology of the thoraco- lumbo-pelvic region
 - Biomechanics of the thoraco- lumbo-pelvic region, including respiration
 - Anatomy-neurophysiology of the kidneys, the bladder, and the bowel
 - Exercise Science related to the pelvis, the muscles, and pelvic floor dysfunctions
 - Basic pain neuroscience
 - Critical appraisal, clinical reasoning, and understanding of scientific methodology
- Behavioral sciences
 - Psychology – emotional, verbal, physical, and sexual abuse. Body image
 - Sociology – communication of sensitive issues
 - Theory and practice of behavior change, motivation and adherence
 - Ethical consideration: awareness of the potential emotional/sexual tensions between therapist and client. The pelvic physiotherapist keeps clear of the boundaries of this area of tension and respects the patient in this regard. In view of the intimacy and the physical and emotional sensitivity of the abdominal/pelvic area the attitude should be one of particular insight, attention and care. Complete an informed consent if available and appropriate according to the local laws.
 - Cultural and ethnical considerations: awareness of potential consequences on investigation and treatment modalities due to cultural and ethnical differences
- Clinical Sciences – basic knowledge of pathophysiology, clinical signs, symptoms, etiology, manifestation of conditions, exercise physiology related to pelvic floor dysfunctions treated by Pelvic physiotherapists
 - All PFM dysfunction
 - Musculoskeletal disorders associated with urological, gynecological, gastrointestinal (GI) conditions and disorders of the thoraco-lumbo-pelvic region, including respiration.
 - Soft tissue disorders related to urological, gynecological, GI conditions.
 - Knowledge to use electrostimulation, biofeedback (EMG and pressure) in the management of PFM dysfunctions.

- Recognize dermatological conditions that need referral
- Ancillary tests – basic knowledge of and interpretation of additional tests
 - Imaging procedures (CT, MRI, US)
 - Urodynamics
- Medical interventions – basic knowledge of medical treatments
 - Surgical medical interventions (SUI, POP, reconstruction, injections)
 - Non-surgical medical interventions (pessaries, plugs, collection devices, intermittent self catheterization)
 - Pharmacological treatments
- Critical inquiry – appraisal and application of research

PELVIC PHYSIOTHERAPIST LEVEL 3

A level 3 pelvic physiotherapist would be expected to:

- Recognize the signs and symptoms of all PFM dysfunctions including urinary, bowel and sexual disorders in all populations.
- Recognize the contra-indications for an internal digital palpation examination and treatment
- Be able to assess, evaluate and treat all PFM dysfunctions including urinary, bowel and sexual disorders in all populations.
- Be able to fully examine, evaluate and treat all thoraco-lumbo-pelvic disorders.
- Be able to use adjunctive therapies such as electrical stimulation, manometry and biofeedback devices.
- Recognize the need to refer to a more skilled pelvic physiotherapist or other specialist

1. C = collect data

- a. **R** = relate medication influence, obstetrical-, surgical- and medical history. Consider the impact of psychosocial issues.
- b. **O** = observation : consider a musculo-skeletal influence on the thoracic lumbo-pelvic region, and the role of anxiety
- a. **M** = measure through validated tests motor function and muscle performance: vaginal and rectal digital PFM palpation examination, PFM reflex testing, soft tissue assessment of the PFM (myofascial mobility, trigger points) and recognize dysfunctions of PFM (weakness, tension, pelvic floor muscle injury). Measure vaginal and rectal pressures and electromyographic (EMG) signals. For voiding / defecation dysfunctions use validated bladder /bowel diary. Assess posture, joint integrity in relation to the pelvis and pain (VAS).

2. I = Interpretation of the data and establishment of physiotherapeutic diagnosis using highly developed clinical reasoning skills which includes the nature and

the extent/severity of the health problem. According to that state, determine which components can be treated by a physiotherapist. Consider local and general interfering factors on the emergence and persistence of the health-problem according to the ICF Body Functions, Body Structures and Impairments in these. Activity, Participation, Activity Limitations and Participation Restrictions. Recognize the need for referral to other health care professional.

3. **P** = Plan, and agree with the patient, objectives for short and long term goals. Create an individual management plan and determine which lifestyle behaviours and musculo-skeletal dysfunctions should be addressed first. Include assessment of patient's prognosis.
4. **I** = Intervention, choose the optimal evidence-based techniques and the tools to be used.
 - a. Coordination and communication – with patients, their partners and/or parents or guardians, other medical and health professionals.
 - b. Patient related instructions – including wellness, bladder training, PFM training, lifestyle modifications, and instruction in sexual matters
 - c. Procedural interventions – strengthen or release the PFM. teach co-ordination of muscles and breathing for example during coughing and bladder training techniques for OAB and SUI, including advice on constipation – therapeutic exercises, body mechanics, postural stabilization, relaxation strategies, co-ordination training, neuromuscular re-education, activities of daily living, manual therapy (myofascial release of PFM, scars, etc), electrical therapy, biofeedback, thermal modalities (heat, cold), ultrasound, dilators, and other modalities according to the local laws. For example in some countries physiotherapist can provide dry needling.
 - d. Understand and apply basic rules of hygiene during assessment and treatment, for both the patient and the therapist.
 - e. Complete an informed consent if available and appropriate according to the local law.
5. **E** = Evaluation : Outcomes assessment – use of appropriate evidence based tools

PELVIC PHYSIOTHERAPIST LEVEL 3

Knowledge areas

- Foundation sciences
 - Anatomy, neurophysiology and pathophysiology of the thoraco- lumbo-pelvic region
 - Biomechanics of the thoraco- lumbo-pelvic region, including respiration
 - Anatomy-neurophysiology and pathophysiology of all related organs
 - Exercise science related to the pelvis, the muscles, and pelvic floor dysfunctions
 - Pain neuroscience

- Principles of relaxation
- Critical appraisal, clinical reasoning, and understanding of scientific methodology
- Behavioral sciences
 - Psychology – emotional, verbal, physical, and sexual abuse. Body image
 - Sociology – communication of sensitive issues
 - Theory and practice of behavior change, motivation, adherence, self efficacy and compliance
 - Ethical consideration: awareness of the potential emotional/sexual tensions between therapist and client. The pelvic physiotherapist keeps clear of the boundaries of this area of tension and respects the patient in this regard. In view of the intimacy and the physical and emotional sensitivity of the abdominal/pelvic area the attitude should be one of particular insight, attention and care. Complete an informed consent if available and appropriate according to the local laws.
 - Cultural and ethnical considerations: awareness of potential consequences on investigation and treatment modalities due to cultural and ethnical differences
- Clinical Sciences – recognition of pathophysiology, clinical signs, symptoms, etiology, manifestation of conditions, exercise physiology related to pelvic floor dysfunctions treated by Pelvic physiotherapists
 - In-depth knowledge of:
 - All PFM dysfunction
 - Musculoskeletal disorders associated with urological, gynecological, GI conditions and disorders of the thoraco- lumbo-pelvic region, including associated respiratory dysfunctions.
 - Soft tissue disorders related to urological, gynecological, GI conditions
 - Knowledge to use electrostimulation, biofeedback (EMG and pressure) and other devices in the management of PFM dysfunctions.
 - Recognize dermatological conditions that need referral
- Ancillary tests – Full knowledge of interpretation and implication to PT treatment of additional tests
 - Imaging procedures (CT, MRI, US)
 - Urodynamics
- Medical interventions – knowledge of implication to PT treatment
 - Surgical medical interventions (SUI, POP, reconstruction, injections)
 - Non surgical medical interventions (pessaries, plugs, collection devices, intermittent self catheterization)
 - Pharmacological treatments

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