

Sample abstracts

The following abstracts are intended as examples of submissions that were accepted for presentation at a past CPA Congress. Please note that submissions for the current Congress should conform to the current submission guidelines available on the website.

Finding Ourselves: The Adaptation Experiences of Transnational Physiotherapists in Ontario, Canada

BACKGROUND: While the number of transnational physiotherapists (TNPs) practicing in Canada is growing, we know very little about their lived experiences. In this study, TNPs are defined as individuals who earned their PT degrees outside of Canada.

PURPOSE: The purpose of this research was to generate a theory that will explain the adaptation process of TNPs in Canada.

METHODS: Using the constructivist grounded theory (CGT) method, 19 Ontario-based TNPs were invited to take part in intensive interviewing. Both first generation PT immigrants and those born and raised in Canada but studied PT abroad were invited to take part in the study. In keeping with the principles of CGT, specific principles and techniques were used in data collection and analysis including theoretical saturation, gerund-based coding, generation of categories and concepts, negative case analysis, and theory generation. Ethics approval was obtained from York University.

RESULTS: The various facilitators and barriers experienced by TNPs led to the emergence of the five stages and six identities of adaptation that ultimately led to the generation of a theory that explained how they adapted personally and professionally.

CONCLUSIONS: Identifying the core theory and stages of adaptation was critical as it opened deeper conversations about the many inequities experienced by TNPs in their integration journey.

IMPLICATIONS: This research has implications at the education, practice, and policy levels, particularly the provision of appropriate and timely support to TNPs during the various adaptation stages. This work also has strong implications to the equity, diversity, and inclusion work of our profession.

KEYWORDS: internationally educated physiotherapists; professional identity; PT migration-labour studies

Effects of community-prescribed ankle-foot orthoses that allow ankle motion for children with cerebral palsy and equinus: A case series

Background: Ankle-foot orthoses (AFOs) that afford ankle motion are commonly prescribed for children with equinus and limited ankle motion. However, little evidence exists to inform clinical decisions about

when to use flexible/hinged AFOs, and decisions are guided by unsubstantiated assumptions that allowing motion improves gait quality.

Purpose: To explore these assumptions, we examined individual responses of children with cerebral palsy and equinus to community-prescribed hinged/flexible AFOs.

Methods: Eight children with equinus (12 limbs with AFOs) underwent 3-dimensional gait analysis with community-prescribed hinged/flexible AFOs, and shoes. Peak stance dorsiflexion, plantarflexion, and knee flexion and extension for each limb were calculated. Meaningful differences between conditions for each individual limb were identified using a two standard deviation threshold. Additionally, responses to AFOs were interpreted relative to normative data, with changes $>5^\circ$ considered clinically significant.

Results: Twenty of 48 individual responses to AFOs were meaningful and clinically significant (12 negative, seven positive, one equivocal). Dorsiflexion increased in 8/12 limbs, but was excessive in 7/12. Responses at the knee were limited (2/12 positive, 1/12 negative, 1/12 equivocal). Overall, gait worsened for six limbs, improved with AFOs for two, and was unchanged for four.

Conclusions: Individual effects of AFOs that allow ankle dorsiflexion can vary for children with equinus. There may be a risk of excessive ankle dorsiflexion and impaired gait quality in the orthoses compared to barefoot walking.

Implications: Physiotherapists have potential to identify suboptimal individual responses to orthotic intervention using clinical gait observation. Prescription decisions should consider factors other than the desire to promote ankle motion.

Keywords: Ankle-foot orthoses, equinus, gait kinematics, orthotic decision-making

Developing a core competency framework for Advanced Practice Physiotherapy

Background: Advanced practice physiotherapy (APP) is an interprofessional model of care designed to address the rising volume of patients, reduce wait times and contain costs. Although APP is growing, there is no standardized competency framework for training practitioners, which has resulted in inconsistencies in their training and education.

Purpose: To develop a core competency framework for APP

Methods: Three studies were conducted. Study 1 was a scoping review of the available literature, which led to the development of a 1st draft of competencies. Study 2 was a series of 4 focus groups using a qualitative descriptive approach to generate feedback on the 1st draft and develop a 2nd draft of competencies. Study 3 was a cross-sectional online survey to validate the 2nd draft of competencies.

Results: In study 1, 19 documents were retrieved; 13 reports and 6 research papers from the UK, Canada, Ireland, Australia, and New Zealand, resulting in 27 competencies. In study 2, 16 participants from the same countries participated in the focus groups. Five themes were developed (Clinical expertise, experienced communicator, strong leadership skills, collaboration, and knowledge creation &

dissemination), resulting in a second draft with 24 competencies. Ninety-nine participants from the same countries completed the survey in study 3. All the competencies met our validation criteria.

Conclusion: We developed a framework for APP with 24 core competencies grouped under 6 domains: Clinical expertise; Communicator; Collaborator, Leader and Health Advocate; Scholar and Professional.

Implications: This study may serve as a global core competency framework for standardizing the training of advanced practice physiotherapists.

Keywords: Advanced Practice Physiotherapy, Competency

Repetitive transcranial magnetic stimulation alone and in combination with motor control exercise for the treatment of individuals with chronic non-specific low back pain: the ExTraStim randomised controlled trial

INTRODUCTION: Motor control exercises (MCE) improves pain and disability but its effect remains modest. Repetitive transcranial magnetic stimulation (rTMS) is a promising technique that alleviates neuropathic pain but its effectiveness to treat CLBP is uncertain. Combining rTMS with MCE may help to address both central and nociceptive factors contributing to CLBP.

OBJECTIVE: To compare the effectiveness of rTMS, sham rTMS, rTMS+MCE and sham rTMS+MCE on pain intensity and disability in CLBP.

METHODS: 87 participants with CLBP were randomly allocated into four groups (rTMS+MCE, sham rTMS+MCE, rTMS, sham rTMS) to receive 10 sessions of their assigned intervention within 8 weeks. Pain intensity and disability (Oswestry Disability Index) were measured at baseline, 4 and 8 weeks, and at 3 months. Linear mixed models were computed using fixed factors rTMS, MCE and Time.

RESULTS: For disability, a significant MCE x Time interaction was observed ($p=0.02$). MCE group improved by 8% at 4-week compared to baseline ($p<0.001$) and by 12% at 8-week (baseline: $p<0.001$; 4-week: $p=0.01$). Non-MCE group improved by 6.5% at 4-week ($p<0.001$) without further improvement at further follow-ups. No between-group difference was observed ($p>0.08$). There was no other interaction. For pain, only a significant effect of Time was observed (3-month: -1.8 pts; $p<0.001$).

CONCLUSIONS: Our results support the beneficial – although modest - efficacy of MCE in CLBP. Active rTMS did not alleviate pain or disability.

IMPLICATION: In line with current guidelines, physiotherapists are encouraged to use exercises to manage CLBP but there is no evidence supporting the use of rTMS.

Keywords: brain stimulation, low back pain, motor control exercise.

Barriers and facilitators to virtual pelvic health physiotherapy interventions in gynecologic cancer survivors: a patient-oriented multi-methods study (Phase 1)

Background: Dyspareunia and urinary incontinence are common urogenital dysfunctions in individuals treated for gynecologic cancers. Pelvic health physiotherapy aims at reducing these dysfunctions. However, barriers such as time, travel and costs are known to limit wide access to pelvic health physiotherapy services. Virtual pelvic health physiotherapy could be helpful for the delivery of these interventions remotely.

Purpose: The main objective of this patient-oriented mixed-method study is to determine the needs and barriers related to pelvic health rehabilitation in individuals treated for gynecologic malignancy.

Methods: Gynecologic cancer patients from Alberta and Quebec answered anonymously 50 multiple choice or open-ended questions spanning the topics of health status, pelvic health knowledge, environmental factors and motivational factors. Descriptive statistics (frequency and percentage, means and standard deviations) were derived from quantitative data, and a thematic analysis method guided the analysis of the narrative content.

Results: Phase 1 reports on the preliminary results from the first n=32 respondents. Respondents reported little knowledge related to pelvic health interventions such as dilation therapy. They recognized several barriers to accessing pelvic health care, including their lack of knowledge on what pelvic health is and lack of resources in rural areas. They identified several key facilitators from virtual delivery of pelvic health physiotherapy interventions: reducing costs, time and travel burden , especially for patients continuing active treatment.

Conclusion: Results from this work provide a greater understanding of how best deliver virtual pelvic health physiotherapy. Findings have the potential to address a gap in access to pelvic health physiotherapy and improve the health of survivors.

Keywords: Pelvic Health, Gynecologic Oncology

A survey of pelvic health content in Canadian entry-to-practice physiotherapy programs

Background: Physiotherapy students require adequate preparation in pelvic health physiotherapy (PHPT), given the gravity of pelvic health conditions. Canadian entry-to-practice curriculum guidelines accord programs considerable flexibility regarding incorporating PHPT content, which may lead to differences between programs and diverse levels of competence among new graduates. However, little is known about how entry-to-practice programs incorporate PHPT content.

Purpose: To determine what PHPT content (i.e., conditions, topics, populations) is taught and how it is incorporated into Canadian entry-to-practice physiotherapy curricula.

Methods: We conducted a cross-sectional e-survey of representatives from Canadian entry-to-practice physiotherapy programs. Questionnaire development and survey administration were conducted using REDCap and the data were analysed descriptively.

Results: 10 out of 15 Canadian programs participated. All programs covered 6 of the 13 queried pelvic health conditions (e.g., perinatal-related conditions, urinary incontinence). All programs covered abdominal wall and pelvic floor anatomy, and pelvic floor muscle training topics. Four programs reported covering internal pelvic floor assessment (either didactically, practically, or self-study), with 1 program indicating that select students performed internal vaginal and rectal palpation. The most commonly covered PHPT populations were cis-female (all programs) and elderly (n=8 programs) populations. PHPT for transgender populations was only covered in 1 program. Programs incorporated PHPT content throughout the required curriculum (n=9) and in optional offerings (n=6).

Conclusions: Canadian physiotherapy programs incorporate different types and amount of PHPT content into their curricula. Future research is warranted to understand the contextual factors that influence these differences.

Implications: This study can inform future efforts by education stakeholders to standardize PHPT education in entry-to-practice physiotherapy programs.

Keywords: pelvic health, education