## The MACP Level 1 Research Award

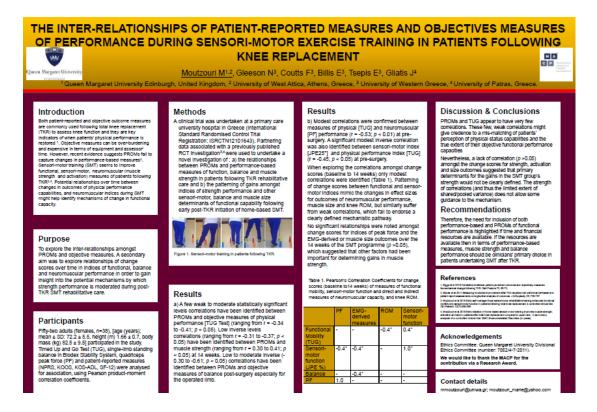
Report from the poster presentations of 19th WCPT Congress, Geneva 2019 and publication of a study in BMC Musculoskeletal Journal

I would like to take this opportunity to thank the MACP for the financial support that I was fortunate enough to be awarded in order to attend and present my posters at the WCPT Congress in Geneva and also reimburse the publications costs of a study related to my PhD to BMC Musculoskletal Disorders.

The Congress was attended by approximately 5,000 physical therapy professionals from over 100 countries around the World and was a unique opportunity to further develop the existing network.

Poster presentations covered a wide spectrum of research including physiotherapists extended role, cost-effective strategies in health care, the women's health filed was highly represented, as well as physiotherapy approaches in health care settings worldwide in sensitive patients with oncological problems.

My research's team first poster presentation was on the interrelationships of patient-reported measures and objectives measures of performance during sensori-motor exercise training in patients following knee replacement. Recommendations from that highlighted the need for inclusion of both performance-based and PROMs of functional performance if time and financial resources are available. If the resources are available then in terms of performance-based measures, muscle strength and balance performance should be clinicians' primary choice in patients undertaking sensorimotor after total knee replacement.



My research's team second poster presentation touched upon the enhanced and extended role of musculoskeletal physiotherapists in using the ultrasound as a means of assessment and feedback tool during rehabilitation. The title was: Real-time ultrasound as a means of feedback of transversus abdominus muscle on low back pain patients: prospective randomized controlled study. The outcomes confirmed the benefits of motor control exercises in reducing pain, improving function, psychosocial levels, motor control and Transversus Abdominus activation in chronic LBP patients. However, the addition of the US as a visual feedback device did not yield any additional benefits. This study provided insight into: a) the effectiveness of a progressive motor control exercise program for improving chronic LBP pain, physchosocial status and motor control function and b) our understanding on the mechanisms behind LBP motor control impairments.

The study submitted to BMC Musculoskeletal Disorders involved an RCT study, part of my PhD, investigating the effects of sensori-motor training on muscle strength, activation and muscle size of patients following total knee replacement. The title was: Early initiation of home-based sensorimotor training improves muscle strength, activation and size in patients after knee replacement: a secondary analysis of a controlled clinical trial. The findings concluded that a prescribed equivalent volume of time spent in sensori-motor training compared to usual practice, delivered within a home-based environment, elicited superior restoration of muscle strength, activation and size in patients following TKR. The gains in neuromuscular performance capability did not appear to be adversely influenced by

patients responding predominantly to concurrent focal sensori-motor stimuli.

Overall dissemination of research in this leading Congress offers a remarkable opportunity for MACP members. To my view, the opportunities given by the MACP for us members, towards the direction of continuation in professional development is really fundamental. It shows that it recognizes and supports our challenges and hard work to progress the profession and MACP level.

I am truly grateful,

Maria Moutzouri, PhD, MSc, MMACP