

Athens, 30th May, 2023

### **The MACP Level 1 Education and CPD Award**

Report from the participation to the 2023 WCO-IOF-ESCEO Congress,  
Barcelona

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 world largest event in the field of osteoporosis, osteoarthritis, frailty and sarcopenia, Congress in Barcelona and present my research posters.

The Congress just took place in Barcelona from May 4 to May 7 was a great success! It was attended by over 7,000 delegates, MDs, health professionals from around the World and was a unique opportunity to further develop the existing network. The members of the Committee of Scientific Advisors of the International Osteoporosis Foundation (IOF) and the European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO) developed a very exciting Congress' scientific programme that brought together the world's best in the field of musculoskeletal health and disease.

The key aspects covered within the agenda of the Congress were insights into innovations in fracture-risk evaluation, the importance of identifying patients at very high risk of fracture in real-world clinical practice, innovative approaches to recognize patients, the optimal treatment pathways for patients with osteoporosis. Moreover, new software material to measure bone quality and detection of up to 30% more patients at risk of fracture at an earlier stage within routine workflow, as well as fine-tune therapy decisions to improve overall patient management.

In the Viatrix Symposium, the importance of an early diagnosis and a holistic approach to treatment for the management of OA was discussed. A five-year project to improve the management of osteoporosis around the globe was agreed between the ESCEO and the World Health Organization Collaborating Center for Epidemiology of Musculoskeletal Health and Aging.

Poster presentations covered a wide spectrum of research including physiotherapists extended role, cost-effective strategies in health care, ergonomic guidelines and novel systems used for feedback of workers and the enhanced role of physiotherapists in the work Industry. The Abstracts

will be also published, in a supplement of the Journal Aging Clinical and Experimental Research, a high impact journal.

With regards to my posters, our research's team first poster presentation was on investigation of blended approach rehabilitation in knee osteoarthritis patients. Recommendations from that highlighted the need for inclusion of both behavioral, exercise and physical activity components in the management of knee OA patients.

## INVESTIGATION OF A BLENDED REHABILITATION APPROACH IN FUNCTION AND PHYSICAL ACTIVITY LEVELS OF PATIENTS WITH KNEE OSTEOARTHRITIS: A RANDOMISED CONTROLLED TRIAL IMPLEMENTED IN STRUCTURALLY WEAK URBAN AREAS IN GREECE.

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| <p><b>M. Moutzouri, G. Gioftsos</b><br/>University of West Attica,<br/>Physiotherapy Dept, Greece<br/>CONTACT <a href="mailto:moutzouri@uniwa.gr">moutzouri@uniwa.gr</a>, <a href="mailto:giofts@uniwa.gr">giofts@uniwa.gr</a></p>     |   | <p>2023 BARCELONA </p> <p><b>M A</b> Musculoskeletal<br/><b>C P</b> Association of Chartered Physiotherapists</p>   |
| <p><b>Introduction</b></p> <p>A great advantage of Web-based rehabilitation is that it can be performed at a self-determined time, and in a home-based environment and increases access in structurally weak areas. There is mounting evidence that orthopedic technology-assisted rehabilitation has a positive impact in KOA. However, there is a need for a blended program that encompasses physical and behavioral elements, with purposeful and flexible physical activity (PA), as well as interplay of self-management and healthcare support to enhance lifelong strategy changes and promote a good fit for the care of KOA.</p>   | <p><b>Methods</b></p> <p>Only general information on KOA from webpage and a walk journey within the community for 5 times/ week.</p> <p>Outcomes</p> <p>PROMs: Pain, Physical function KOOS, PA (via diary, LEAS, Baecke questionnaire) and SF-12, TSK</p> <p>PBOMs: TUG Test, CRT</p>   | <p><b>Usual care</b></p>   |
| <p><b>Purpose</b></p> <p>The investigation of a 6-week web-based rehabilitation program of exercise, advice enhanced with outdoor structured PA to manage pain and physical function in KOA patients compared to an outdoor PA program alone.</p>  | <p><b>Results</b></p> <p>A total of 44 participants were analyzed, including 22 participants in the WB-OPA (mean [SD] age, 65.1 [5.3] years; 15 [68.2%] women; 13 [59.0%] retired) mean [SD] BMI, 24.1 [5.5]) and 22 participants in the usual care group (mean [SD] age, 63.5 [5.6] years; 19 [86.3%] women; mean [SD] BMI, 23.9 [5.9]), 15 [68.2%] retired).</p> <p>No between-group analysis of mean change from baseline to 6 weeks was shown in the KOOS subscales, however the WB-OPA group improved statistically significantly over the 12-week time in the KOOS subscales for pain (F= 11.9; p &lt;0.001) and symptoms (F= 8.9; p &lt;0.005). Statistically significant between-group differences were found for PA measures, with LEAS showing greater improvement for the intervention group at 6 weeks and preserved over the 12 weeks follow-up (F= 7.3; p &lt;0.01).</p> |   |
| <p><b>Methods</b></p> <p>This was an exploratory, assessor-blinded, parallel group, 2-arm prospective randomised controlled trial. The protocol conformed to CONSORT guidelines. (ISRCTN12950684/27-09-2020). Ethics approval was granted by the Ethics Committee of the University of West Attica, Greece (49238/09-07-2020). Sixty patients were recruited from the community of West Attica, Greece, to support weak, relevantly neglected infrastructure and poorer financially resources this region holds. An introductory session was scheduled for all participants (both groups) to get familiarized with the webpage environment and agree the journey route of the outdoor walking program, appropriate for each participant.</p> <ul style="list-style-type: none"> <li>Web-based and outdoor PA program (WB-OPA)</li> </ul> <p>WB-OPA (based on ESCAPE-knee pain resources) involved an exercise-based (35-40 min) program to improve function by integrating exercise, education, and self-management strategies. In the introductory session individual passwords were provided in order to register and have access to the rehabilitation regime. Participants attended 12 sessions, for 6 weeks. Education included video information on OA related topics, i.e. ice, pacing etc. Thrice weekly a walk journey of 500-800m was prescribed</p> | <p>With regards to the PBOMs statistically significant differences between groups for the TUG test (F= 4.8; p &lt;.05), the 30s CRT (F=3.9, p &lt; 0.05) with the WB-OPA showing greater improvement. Both SF-12 physical and mental components showed statistically significant within-group improvements for the two groups at the 12 weeks follow-up (F=9.9; p&lt;0.005).</p>   | <p><b>Discussion &amp; Conclusions</b></p> <p>The current study providing a blended approach of self-managed web-based exercise, consultation and prescribed PA, compared to usual encouragement of PA, showed statistically significant reduction in pain, PA levels and clinically meaningful improvement in physical performance clinical tests</p> |
| <p><b>Acknowledgements</b></p> <p>This research project was co-financed by IKY (State Scholarship Foundation) (Greece) Acknowledgements to the KEP-YGIEIAS Peristeriou, Peristeri municipality, Attica for the participants.</p> <p>This publication is partly funded by the University of West Attica, Greece. Acknowledgements to the Musculoskeletal Association of Chartered Physiotherapists for the support.</p>   |  |  |

My research's team second poster presentation touched upon the transcultural adaptation and validation of Lower Extremity Activity Scale, a knee specific scale of PA in the Greek language, as a means of assessment and feedback tool during rehabilitation. The findings confirmed the benefits of using disease specific scales in the categorization of OA patients.

## TRANSCULTURAL ADAPTATION, VALIDATION AND INVESTIGATION OF PSYCHOMETRIC PROPERTIES OF THE GREEK VERSION OF THE LOWER EXTREMITY ACTIVITY SCALE (LEAS) IN PATIENTS WITH KNEE OSTEOARTHRITIS.

M. Moutzouri, A.G. Kladouchou, G. Gioftsos  
University of West Attica, Physiotherapy Dept.



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ΠΑΝΕΠΙΣΤΗΜΙΟ ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ  
UNIVERSITY OF WEST ATTICA



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### Introduction

Current physical activity (PA) guidelines suggest that people with KOA should be as physically active as their abilities and condition allows. Experiencing benefits from exercise and PA participation, has shown to help shaping positive beliefs and motivating individuals towards maintaining activity. Detailed assessment and evaluation of PA in KOA patients may contribute to a better understanding of the disease process and clinical outcomes. The Lower Extremity Activity Scale (LEAS) is one the most-widely used and rigorously developed valid scales for assessing PA level in patients KOA. No such specific scale exist in the Greek language.

### Purpose

The investigation of LEAS' psychometric properties in the Greek language for patients with KOA.

### Methods

The adaptation process of LEAS took place after the author's approval (Saleh J. Khaled). For the transcultural adaptation of LEAS in the Greek language the international guidelines by Beaton et al, using the **backward translation approach** the were followed. Thirty eight (38) (31 women, 63,4 years old) eligible and consenting participants with KOA were recruited from the West Attica region, Greece after a comprehensive face-to face session, screening the level of their PA. Internal consistency, test-retest reliability, construct validity, convergent validity and responsiveness were assessed. Statistical analysis using the statistical program S.P.S.S (Version 24.0).

### Methods

Pearson correlations were investigated amongst measures of functional performance (KOOS, TUG test, CRT), PA (diary, Baecke scale), QoL (SF-12) and kinesiophobia TSK.

### Results

The transcultural adaptation of LEAS into Greek did encounter difficulties. Cronbach's alpha was found as 0,98, showing a high level of internal consistency. Test-retest reliability of LEAS was high (ICC=0,96). LEAS was correlated with the VAS scale, the subsections of the KOOS, SF-12 ( $r = 0.47, p = 0.01$ ), TSK questionnaires ( $r = -0.58, p = 0.002$ ), and the Time Up and Go ( $r = -0.485, p = 0.004$ ) and Chair Rise Test clinical tests.

### Conclusions

The Greek version of the of LEAS was found as reliable and valid scale for the clinical population of knee OA assessed and can therefore be used by health professionals. Therefore, it is a tool available for use in future clinical research and practice.

### Acknowledgements

This publication is partly funded by the University of West Attica, Greece. Acknowledgements to the Musculoskeletal Association of Chartered Physiotherapists for the support. Acknowledgements to the KEP YGEGIAS Peristeriou, Peristeri municipality, Attica for the participants.



Πρόγραμμα "Βαδίζω"  
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UNIVERSITY OF WEST ATTICA

Contact details  
[moutzouri@uniwa.gr](mailto:moutzouri@uniwa.gr)



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

Assistant Prof University of West Attica, Greece

moutzouri@uniwa.gr