## Greg Grieve Award 2023- Carol McCrum

I am very grateful to the MACP for supporting my opportunity to present at the World Physiotherapy Congress 2023.

<u>World Physiotherapy</u> is the international organisation bringing together the World's Physiotherapy professional bodies. It aims to represent physiotherapy across the world, advancing our profession, advocating access for all and working to improve health and well-being. It connects 129 member organisations and is a non-profit organisation and registered as a charity (World Confederation for Physical Therapy) in the UK. For 2023, the Congress was renamed World Physiotherapy Congress (#WCP2023) and was an incredible coming together of physiotherapists from over the world, even more special with the universally experienced legacy of Covid 19 having had such an impact on physiotherapists and the profession with losses and incredible innovations.

A great start to the conference was the opportunity for a clinical visit to an Msk department to Dubai Hospital. The dedication of the physiotherapy team for providing high quality care was very evident. Currently referrals come through hospital physicians undertaking an initial assessment however the physiotherapists are autonomous in the care strategies provided, and the length, content and frequency of treatments. The team were incredibly welcoming with a staff of 22, with a 4 week wait for non-urgent referrals, and access to sophisticated rehab equipment, hydrotherapy, using electronic records system and undertaking very similar programmes for post-surgical rehab such as for ACLs, joint replacements, and inflammatory conditions. The service accommodates the UAE cultural requirement for single gender treatment spaces and utilise their approaches and expertise, as well as a breadth or CPD opportunities to achieve high quality, personalised care in their local health context.

The conference was quite incredible, underpinned by the enthusiasm from being able to connect as a face-to-face event and the opportunity to learn from the breadth of sessions. There was such a wide range of attendance of physiotherapists from so many countries and research, some focussing on the innovations due to and so many others completed despite Covid 19.

It is still possible to <u>register</u> at a significantly reduced cost to <u>rewatch</u> the many sessions that were recorded as an online event on 23-25 June 2023. The online event will include access to all recordings of presentations, and posters from the in-person event and live Q&A discussions with presenters from the in-person event. This includes:

- short online live welcome and closing sessions
- 30-minute live Q&A sessions with the relevant presenters to discuss issues raised in:
  - 17 focused symposia sessions, 13 discussion sessions, 13 seminar sessions
  - 3 World Physiotherapy seminar sessions
- 45 platform abstract sessions including over 200 presentations
- access to over 800 uploaded poster and ePoster presentations

If there was one session to re-watch, it could be the session titled:

• INDIGENOUS LEADERSHIP: REIMAGINING HEALTH EDUCATION FOR AND WITH INDIGENOUS COMMUNITIES.

There are not many sessions that receive standing ovations, and this was one – mostly for the courage of the speakers to explain their cultures, share their experiences and to offer innovative solutions that foster inclusiveness. The points made about their student and professional challenges and the positive impacts of their indigenous approaches now in their practice were inspiring and thought provoking. These innovative, inspiring physiotherapists of indigenous heritage talked of how incorporating local culture and local knowledge is key for their professional value and their sense of

personal clinical effectiveness in their local populations. Research shared using modern digital technology and sensors to evaluate traditional, indigenous ways of moving and rehabilitating after injury was fascinating.

The theme of World Physiotherapy Day 2023 in September is Inflammatory Arthritis, so it was a timely and valuable opportunity to present the <u>UK Rheumatology Physiotherapy Capabilities</u> <u>Framework: Screening, Assessment and Specialist Management</u> hosted on the MACP website to the conference's global audience. For those not directly working in rheumatology, the standards remain invaluable. The prevalence of inflammatory diseases is estimated to occur in 5-7% of the population in the Western world. We all want every clinician to have these capabilities if we or one of our family are presented with an undiagnosed inflammatory disease, or access to specialist knowledge when needing treatment if diagnosed, no matter where in the world. There was also the opportunity to present on the value of MsK physiotherapists having prescribing knowledge and capabilities, as much for the medicines' optimisation and deprescribing benefits, as well as being enabled to prescribe.

There was abundance of valuable research presented in the Musculoskeletal strand and MACP colleagues providing key symposiums and workshops. It was fascinating to hear of novel brain neurobiological mechanisms that may play a role in neuro-musculoskeletal pain and recovery. This included discussion on how peripheral biomarkers, such as blood and hair cortisol, may interact with psychological and social variables and recovery after neuromuscular pain conditions. Other research of interest around this area of science discussed in this symposium can be seen in some references provided.

Also of interest were examples of what advanced practice physiotherapy (APP) means to physiotherapists in low-resource settings by drawing on examples from countries in Africa. It made you rethink what APP is and how the implementation of APP is influenced by the local contexts such as the level of entry-level physiotherapy education, the resources available to the therapist, and the local support provided by the health care system.

A final study of interest when thinking about the health benefits of physical activity and exercise was a review of the effects of isometric hand grip exercising on blood pressure. There was favourable evidence of a professionally supervised hand grip protocol for blood pressure reduction across a range of normotensive healthy populations and patients diagnosed with hypertension. A common protocol was four sets with 2 minutes of isometric hand grip contraction at 30% of a maximal voluntary contraction, with a minute rest, at a frequency of three times per week for eight weeks, with both hands or unilateral in the non-dominant hand. Eight studies reported post-training blood pressure reduction, reported decreased systolic, diastolic, and mean blood pressure. Thirteen studies reported a drop in systolic blood pressure with an average of 8mmHg. This is an interesting direction to consider in the type of exercise that might beneficial, and especially those who find it challenging to perform aerobic exercise, or as an adjunct. Exercise using hand gripping tasks may be having a benefit not previously considered.

The most powerful presentations that were universally agreed by those attending and that impacted on every participant's thinking regardless of specialty were speakers that told of experiences that challenged us around how we experience being a physiotherapist, how we interact, develop evidence, deliver our education, provide our care and measure our value. So much of our research evidence and ways of practicing and measuring are developed in and for high income country healthcare settings, and for great benefit for safe effective care in our settings- but how to scale it out to other settings was very enlightening for what we take for granted in our own healthcare settings when physios from across the globe stand up and talk about their settings and challenges.

Such a small amount of the value of attending the conference is touched on here. I wish to thank the MACP for the support to attend and the opportunity to make a contribution by sharing our UK professional guidance and research to support global advances in physiotherapy at #WCP23.

## **References of interest**

Lee et al. An exploration of blood marker x environment interaction effects on pain severity and interference scores in people with acute musculoskeletal trauma. Clin J Pain:2021;37;747-758

Walton D et al. A mediation analysis of stress, inflammation, sleep and pain in acute musculoskeletal trauma. Clin J Pain:2020;36:197-202

Jenkins LC et al. Somatosensory Cortex Excitability in the Acute Stage of Low Back Pain Causes Chronic Pain. *J Pain.* 2022 Feb;23(2):289-304.

Cavaleri R et al. Repetitive transcranial magnetic stimulation of the primary motor cortex expedites recovery in the transition from acute to sustained experimental pain: a randomised, controlled study. *Pain.* 2019 Nov;160:2624-2633.

