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## S130

**Telehealth delivery of GLA:D® Australia during the COVID-19 pandemic**C. Barton<sup>a,c</sup>, K. Dundules<sup>a</sup>, A. Ezzat<sup>a,b</sup>, J. Kemp<sup>a</sup>, M. Pazzinatto<sup>a</sup><sup>a</sup>*La Trobe Sport and Exercise Medicine Research Centre, School of Allied Health, Human Services, and Sport, La Trobe University, Australia*<sup>b</sup>*Department of Physical Therapy, University of British Columbia, Canada*<sup>c</sup>*Department of Surgery, St Vincent's Hospital, The University of Melbourne, Australia*

**Introduction:** Knee and hip osteoarthritis (OA) affects 2.2 million Australians. Symptoms (pain and stiffness) reduce physical activity and impair health-related quality of life. Good Living with osteoArthritis from Denmark (GLA:D®) is an evidence-based program providing education and exercise-therapy for people with knee and hip OA, now offered at more than 400 sites across all states and territories in Australia. A key barrier to GLA:D® is the need to attend face-to-face sessions. In response to the COVID-19 pandemic, we expanded implementation to support GLA:D® via telehealth. This project evaluates the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM framework) of GLA:D® via telehealth in Australia during the pandemic.

**Method:** In this cohort study, people with hip or knee OA who reported completing telehealth-only GLA:D® at 3-month follow-up from March 2020-March 2021 were identified from the GLA:D® Australia registry. RE-AIM dimensions were examined descriptively. For the effectiveness domain, mean differences [MD, (95% confidence intervals)] from baseline to 3-month follow-up were calculated for pain (visual analogue scale, 0-100), quality of life (knee injury and osteoarthritis outcome score or hip disability and osteoarthritis outcome score - joint-related quality of life subscales), and 30-second chair stand test.

**Discussion:** Participant demographics and clinical outcomes related to GLA:D® delivered via telehealth in Australia during the pandemic were comparable to published data related to face-to-face delivery. However, implementation was limited. Future qualitative work will explore barriers and enablers of GLA:D® via telehealth to guide strategies and resources (e.g. training, telehealth toolkit) to normalise the delivery of GLA:D® via telehealth as part of physiotherapy practice.

**Conflict of interest statement:** GLA:D® Australia is a not-for-profit organization that receives income from training physiotherapy training courses. This income contributes to salary support for AE, MP, KD.

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## S131

**Sex differences in knee-related symptoms, psychological factors and quality of life in runners who have had knee surgery**A. Bruder<sup>a</sup>, K. Crossley<sup>a</sup>, A. Culvenor<sup>a</sup>, D. de Oliveira Silva<sup>a</sup>, M. Haberfield<sup>a</sup>, R. Johnston<sup>a</sup><sup>a</sup>*La Trobe University, Australia*

**Introduction:** Many people who sustain a knee injury and undergo surgery choose to continue or start running. Previous reports indicate that women have worse patient-reported outcomes than men following knee surgery. However, little is known about sex differences in patient-reported outcomes for people who have chosen to participate in running post knee surgery. We aimed to compare self-reported knee-related symptoms, psychological factors

and quality of life between women and men running athletes with a history of knee surgery.

**Methods:** A convenience sample of 103 running athletes (18-50years, run  $\geq 10$ km/week and  $\geq 3$  sessions/week), with a history of knee surgery were recruited. Participant characteristics collected included age, sex, height, body mass, and weekly running frequency and total distance. Knee-related symptoms were assessed using six subscales of the Knee injury and Osteoarthritis Outcome Score (KOOS), including (i) pain; (ii) symptoms; (iii) function during activities of daily living; (iv) sports and recreational activities; (v) quality of life; and, (vi) patellofemoral joint symptoms, the Tampa Scale for Kinesiophobia and the Knee Self-Efficacy Scale. Independent t-tests were performed to compare outcomes between women and men. Effect sizes were calculated using Cohen's d.

**Results:** Female runners (n=32, 34.5 years, 63.7kg, 1.7m) had lower body mass and height compared to male runners (n=71, 35.2 years, 77.1kg, 1.8m), but were of similar age, and reported similar running frequency/distance and time post-surgery. Compared to men, women reported worse KOOS-symptoms (mean difference -5.39, 95%CI 10.81, 0.02; effect size -0.42), function during activities of daily living (-2.63, 95%CI -4.99, -0.26; effect size -0.47), and patellofemoral joint symptoms (-5.43, 95%CI -10.68, -0.17; effect size -0.44). There was no sex-differences observed for KOOS quality of life or sport and recreational subscales, kinesiophobia or knee self-efficacy.

**Discussion:** Women with a history of knee surgery had evidence of worse self-reported outcomes than men, but it is unclear why. Our findings highlight the need to evolve our understanding and management of women who have chosen to participate in running post knee surgery, in particular focusing on improving their knee-related symptoms and function. (i) Why do women have inferior outcomes? (ii) Do women need a specific and more targeted rehabilitation approach pre- or post-operatively than men to enhance outcomes? Such knowledge would be of practical value for coaches, athletes, and health professionals to optimise sex-specific training and treatment strategies.

**Conflict of interest statement:** My co-authors and I acknowledge that we have no conflict of interest of relevance to the submission of this abstract.

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## S132

**Investigating neural representations in response to posterior thigh pain – a potential risk factor for hamstring injury recurrence?**R. Cavaleri<sup>a</sup>, S. Imam<sup>a</sup>, N. Moukhaiber<sup>a</sup>, E. Rio<sup>e</sup>, S. Summers<sup>a,b,c</sup>, D. Thomson<sup>d</sup><sup>a</sup>*Brain Stimulation and Rehabilitation (BrainSTAR) Lab, Western Sydney University, Australia*<sup>b</sup>*Research School of Biology, Australian National University, Australia*<sup>c</sup>*Discipline of Sport and Exercise Science, Faculty of Health, University of Canberra, Australia*<sup>d</sup>*School of Health Sciences, Western Sydney University, Australia*<sup>e</sup>*La Trobe Sport and Exercise Medicine Centre (LASEM), School of Allied Health, College of Science, Health and Engineering, La Trobe University, Australia*

**Background:** Recurrent hamstring injuries are a major problem in sport. Despite extensive research regarding risk factors underlying hamstring injury, recurrence rates remain high, suggesting our current understanding may be overlooking important neurophysiological factors. Recent evidence demonstrates disruptions in tactile, proprioceptive, and spatial neural (cortical) representations in athletes who develop persistent posterior thigh pain following a hamstring injury. It is possible these disruptions may contribute to poor recovery and hamstring injury