

Keep Moving – overcoming physical, mental and pandemic challenges to stay active

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There is a little argument against the benefits of physical activity for any cohort: healthy individuals, patients with non-communicable disease, auto-immune conditions and cancer patients. However, the physical activity requirements and the challenges to fulfil those requirements may vary for different populations. Athletes overcome many challenges to reach their goals. Recently, a major hurdle to fulfilling physical activity requirements was COVID-19. To represent this conquering spirit we have Michaela Whitebooi on the cover of this edition. Michaela is a multiple African Senior Judo Champion (under 48kg category) who has overcome injuries and personal factors to reach not only her sporting goals as a 2020 Tokyo Olympian, but also her academic goals through obtaining an Honours degree in Internal Auditing and a Post Graduate Diploma in Entrepreneurship.

CURRENT HAPPENINGS IN #SASMA

As an association, SASMA (@SASMA_ZA) too has faced difficulties during COVID-19, having our biennial meeting cancelled in 2021. We proudly announce the International Festival of Sports, Exercise and Medicine Conference 2022 (IFSEMC 2022; <https://ifsemc2022.co.za/>). The 19th SASMA Congress will be held in Pretoria, South Africa, from 29 September to 2 October 2022. It is a multidisciplinary conference with the Biokinetics (Exercise Therapists) Association of South Africa (@BiokineticsSA), the South African Society of Biomechanics (@Biomech_SA), and Physical Activity, Sport and Health for Development in Africa (PASHDA) and reflects the evolution of sports medicine in South Africa. The origins go back to 1983 when SASMA was formed. Research, teaching and education played a big role, and the main focus was to promote knowledge of the prevention and treatment of sports injuries. In 1990 members from allied disciplines were allowed to become full members of SASMA. That coincided with a growth in membership and training of students in sport and exercise medicine, physiotherapy and rehabilitation in most academic institutions in the country. Research has flourished with many South Africans being active on international platforms. The theme of the conference is 'Evidence based practice where exercise, evidence & science meet'. It is arguably the largest sport and exercise medicine conference on the African continent. The

associations which are collaborating to organise the conference (SASMA, BASA, SASB, PASHDA) are independent yet share a common vision of using sport and exercise to promote health and wellbeing. The conference includes symposia and workshops as well as presentations of original research and clinical cases. Students are also well catered for with a student mini-conference running in parallel to the main programme, and an opportunity to compete for the prestigious young investigator award. Confirmed keynote speakers include @Nim_Perera, @DocPluim, Michael Kjaer, @WvanMechelen, @VGouttebarga and @JacquelineUWA

In this SASMA-led edition of BJSM, we also shine a “Service Spotlight” on Congress co-organiser and our President-Elect, Dr Sharief Hendricks @Sharief_H.

WHATS IN #OURBJSM ?

Physical Activity and Exercise in Different Populations

To optimise the benefits of physical activity, population-specific guidelines may be required. Dr Loo and representatives from the Asia-Pacific region developed a consensus statement on integrated 24-hour activity guidelines for children and adolescents, aged 5–18 years, regardless of gender, cultural background or socioeconomic status. These guidelines provide the latest evidence-based recommendations towards a holistic approach for beneficial lifestyle activities (bjsports-2021-104527). In an editorial, Prof Naidoo highlights that people with disabilities are insufficiently active. She points out the need for effective translation and how culturally-appropriate language and graphics may better deliver the message to the target population. Her group worked with multiple people with disabilities and key stakeholders in equitable ways to co-produce an infographic to communicate physical activity recommendations for a range of experiences of disability in Africa (bjsports-2021-104855).

Interpersonal violence in the form of neglect, psychological, physical and sexual harassment and abuse, is increasingly recognised as a risk of sports participation and linked to negative physical and mental health outcomes. Using a qualitative approach with 26 para-athletes from three lower resourced countries (Ghana, Brazil and India), Dr Tuakli-Wosornu and colleagues explore the characteristics of abuse observed, navigated and experienced by para athletes (bjsports-2021-104545).

In the trail running population, runners have to contend with off-road terrains, substantial elevation changes and varying running distances from a few kilometres to multiday ultramarathons (>200 km). While a large body of evidence exists on running-related injury risk factors, little is known about risk factors specific to trail running.¹ To address this gap, young South African clinician researcher Carel Viljoen and his team conducted a living systematic review on trail running and injury risk (bjsports-2021-104858).

For our PhD Academy Award, Dr Dalen-Lorensen summarises his PhD which aimed to improve our understanding of the relationship between training load and health problems in football to guide and test preventative measures. He explains that the relationship may be more complex than we thought, and advocates for practitioners to embrace uncertainty and move back to the basics (bjsports-2021-105403).

Physical Activity, Exercise and COVID-19

Across the globe, athletes have reported a decrease in physical activity since COVID-19.^{2,3} However, regular physical activity may have a protective effect against adverse outcomes from COVID-19. Prof Jon Patricios and colleagues, using data from South Africa, where different SARS-CoV-2 variants were prevalent, demonstrate a positive association between physical exercise and protection against adverse outcomes from COVID-19. The first such study to use objectively measured physical activity, they show a protective effect at even less than recommended levels (bjsports-2021-105159) . How this study may be received in the media seems to depend not only on the quality of the work but other factors as well. These are highlighted in a discussion piece where O'Hagan et al. compare the media coverage for two studies^{4,5} investigating the relationship between exercise and COVID-19 and note that timing or the country of origin of the publication may influence the Altmetric of the article (bjsports-2021-105012).

How can we promote physical activity? Especially during a pandemic, which has caused an increase in anxiety and depression. The COVID-19 Pandemic and Exercise (COPE) trial aimed to reduce depressive symptoms in the general population in the early months of the pandemic. Puterman and colleagues used a suite of mobile applications, at-home exercise, including high intensity interval training (HIIT) and/or yoga. The authors proposed that app-based exercise at-home, in various forms (yoga or high-intensity interval training or their combination) can significantly improve depressive symptoms over a 6-week period in adults during the pandemic (bjsports-2021-104379).

What happens after highly trained athletes contract SARS-CoV-2 though? Vágó et al. investigated the cardiovascular consequences of SARS-CoV-2 infection in highly trained, otherwise healthy athletes using cardiac magnetic resonance (CMR) imaging. Studying 147 highly trained athletes after SARS-CoV-2 infection, they found that cardiac involvement on CMR showed a modest frequency (4.7%), with definite signs of myocarditis present in only 1.4% of the sample. Comparing athletes to healthy sex-matched and age-matched athletes, they also found no difference between CMR parameters, including native T1 and T2 values (bjsports-2021-104379).

Reunite with the SASMA Family

Please enjoy this South African-flavoured edition of BJSM and join us at our conference at the end of September! Collegiality, intellectual stimulation, sunshine and good wine await!

References

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