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Sport and exercise medicine around the world: global challenges for a unique healthcare discipline

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Since October 2021, *BMJ Open Sport & Exercise Medicine* has conducted a blog series entitled: ‘*Sport and Exercise Medicine Around the World*’.¹ Sport and exercise medicine (SEM) professionals were invited to provide their perspectives on SEM in their countries by replying to the following questions:

1. What is the path to becoming a sport and exercise physician/physiotherapist/scientist in your country, and what are the main hurdles on this path?
2. How developed is collaborative work in SEM in your country?
3. Are exercise physiologists/scientists integrated into your healthcare system, and does health insurance cover their services?
4. What is done in your country to promote SEM among students and young professionals regarding research and clinical opportunities?
5. Finally, what would you change to SEM in your country if you were Harry Potter?

Twenty-five blogs have been published, written by 26 SEM professionals (20 physicians, 4 physiotherapists, 1 chiropractor and 1 exercise scientist) representing 22 countries (Europe=11, Asia=4, America=3, Africa=2, Oceania=2; [figure 1](#)) and 2 genders (50% women, 50% men). This editorial highlights our collective takeaways from these blogs and outlines potential future developments for SEM globally.

SEM: A KEY LABEL FOR A BROADER RECOGNITION

Most countries (Australia, Brazil, Canada, France, the Netherlands, New Zealand, Singapore, South Africa, Sri Lanka, Sweden, Switzerland and the UK) now use SEM to designate our discipline. In contrast, some countries (Argentina, Belgium, Germany, Latvia, Portugal, Qatar, Thailand and Turkey) still use the term sport medicine. In our opinion, adopting the term SEM globally is an essential step towards unifying a field that encompasses both the management of health issues related to physical activity (ie, sport medicine) and the prescription of exercise to prevent and treat diseases (ie, exercise medicine).² This appellation better positions SEM professionals towards policy makers as specialists uniquely equipped to manage musculoskeletal disorders, sport-related conditions and chronic diseases. In fact, in a number of countries, a key factor influencing the recognition of SEM as a stand-alone medical specialty was the impact of SEM on disease management, quality of life and healthcare costs.³

SEM EDUCATION: HETEROGENEOUS JOURNEYS TO THE GRAIL

Following the pioneer countries of Australia, New Zealand and the UK, several countries introduced a stand-alone SEM specialty for physicians (Argentina, Brazil, Latvia, Portugal, the Netherlands, Turkey, South Africa, Sri Lanka and Singapore). Interestingly, western countries traditionally



Figure 1 Geographical locations of the contributors to the blog series 'Sport and Exercise Medicine (SEM) Around the World'.

recognised for having high-quality healthcare systems, such as Belgium, Canada, France, Germany, Sweden and Switzerland, have not yet adopted the stand-alone SEM specialty model. Consequently, young physicians desiring to pursue a career in SEM must combine full clinical training in another specialty before additional training in SEM. However, such additional training is often insufficient to reach the level of expertise encountered in other medical specialties.⁴

Training paths to sport physiotherapy are equally sinuous. Following undergraduate physiotherapy training, it is often possible to enrol in a Master's degree or postgraduate diploma in sport physiotherapy. Unfortunately, sport physiotherapy is not a protected title in every country, often due to a lack of recognition by local health or sport authorities. Thus, a sport physiotherapy title may not increase professional responsibility or earnings. Regardless of the profession, pursuing a career in SEM requires a lot of enthusiasm and sacrifice, while interspecialty recognition might be lacking.

INTERDISCIPLINARITY: A CENTRAL FEATURE OF SEM

While physicians have traditionally dominated healthcare systems,⁵ SEM represents a markedly interdisciplinary culture with different professions often complementing one another.⁶ In countries such as Australia, New Zealand and South Africa, this is supported by multidisciplinary sport medicine societies that actively promote this interdisciplinary culture. In many countries, however, collaboration remains in its infancy and is often limited to private practice, high-performance or university settings.

The limited inclusion of SEM in the public healthcare system, restricted funding, and a lack of professional recognition were commonly noted as rate-limiting factors for collaboration. For example, reimbursement is often lacking for services delivered by sports psychologists, nutritionists and exercise physiologists. In Australia, New Zealand and the UK, however, clinical exercise physiologists are uniquely recognised as healthcare providers and embedded into the public healthcare system. Given the effectiveness of the services clinical exercise physiologists provide,⁷ policy makers from other countries

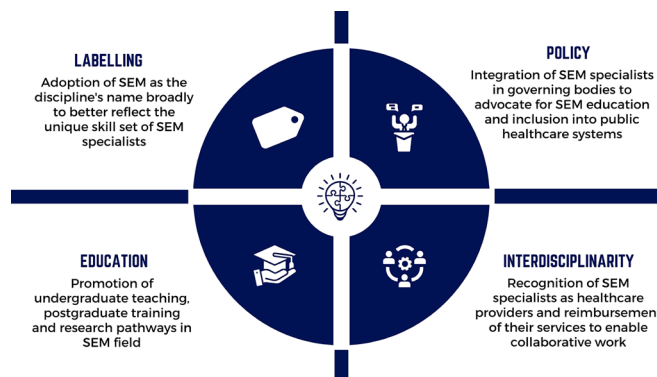


Figure 2 Challenges currently faced by sport and exercise medicine (SEM) and suggested solutions.

should consider how a similar recognition could curb the burden of chronic diseases.

SUGGESTIONS FOR ADVANCING SEM

Figure 2 summarises challenges in the SEM field and suggests solutions. As said by American civil rights activist Marian Wright Edelman, 'You can't be what you can't see'. Consequently, SEM should be more visible in the health-based undergraduate curricula.^{8,9} This exposure would contribute to raising awareness and unveiling vocation among students. SEM teaching should ideally be delivered interdisciplinary where lecturers and students of different backgrounds copresent.¹⁰

Additionally, it is necessary to involve SEM specialists in health-related governing bodies to better translate research findings into clinical practice, healthcare policies and insurance coverage. Establishing medical specialties for SEM and integrating sport physiotherapists and exercise scientists/physiologists more comprehensively into healthcare systems are also essential. Improving accessibility to SEM providers for patients of all conditions and athletes of all levels is another important step to ensure adequate knowledge implementation and care delivery.

To improve SEM-related knowledge, further efforts to create research opportunities for interested students and professionals are required. The combination of medical residency with doctoral/postdoctoral time and access to higher academic education (Master's degree or PhD) for allied health students should be facilitated. In addition, professor positions should be established to ensure high-quality SEM research and teaching. Ultimately, we firmly believe that patients, communities and economies would benefit from stronger SEM integration and more proactive healthcare systems.

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