Practical report

Clinical audit of a sports psychiatry clinic in Malaysia

Insights on the development of mental health services for athletes

Eugene Koh Boon Yau[1,2], Anis Naazira Binti Abdul Rauf[1], Yasmin Hanani Binti Rozley[2], Nicholas Pang Tze Ping[3], and Mohammad Hamiruce Marhaban[1]

[1]Sports Academy, Universiti Putra Malaysia, Serdang, Malaysia
[2]Department of Psychiatry, Hospital Sultan Abdul Aziz Shah, Universiti Putra Malaysia, Serdang, Malaysia
[3]Department of Psychiatry, Faculty of Medicine & Health Sciences, Universiti Malaysia Sabah, Kota Kinabalu, Malaysia

Abstract: *Introduction:* Sports psychiatry is a young subspecialty of psychiatry that has expanded in recent decades. However, information on mental health issues among athletes remained limited. Malaysia's first sports psychiatry clinic (SPC) was established in 2021. *Methods:* A clinical audit of the SPC was conducted to provide insight into the referral patterns, demographic characteristics of athletes seeking help, and the types of diagnoses and treatments received. This audit was conducted between September 2021 and October 2024. *Results:* Twenty-seven athletes were identified, with a mean age of twenty-one and a majority of female gender. The athletes came from various individual and team sports, had sports representation from school to national level and were commonly referred from a sports institution. Diagnoses received are primarily anxiety-related disorders. Notable non-DSM-5 diagnoses included athlete burnout, migraine, and post-concussion syndrome. The most common treatment modalities are either medication and psychotherapy or medication only. *Conclusion:* This audit highlights the low uptake of mental health services amongst athletes, the common diagnoses that present to SPC and the need for further development in this area.

Keywords: Sports, mental health, psychiatry, clinical services

Introduction

Sports psychiatry has gained traction recently as a holistic approach, integrating mental well-being as a core component of athletic success [1]. Athletes are subjected to unique stressors that can significantly impact their mental health, making specialised psychiatric care essential for their overall performance and well-being [2]. Recognising the need for specialised mental health services for athletes, Malaysia's first Sports Psychiatry Clinic (SPC) was established in September 2021. This clinic, run by a sports psychiatrist and clinical psychologist, offers mental health services designed to meet the unique needs of athletes. The SPC provided service within a university teaching hospital and partially supported financially by public healthcare services. The clinic receives referrals from other healthcare and sports-related institutes, and the cases will be allocated to the sports psychiatrist or clinical psychologist, depending on the case's needs. If necessary, the sports psychiatrist and clinical psychologist will co-manage the case. As the clinic is a newly established service, case referrals were initially slow and gradually built up over the years. The clinic receives an average of one to two new referrals monthly in 2024.

The data available on the prevalence of mental health issues among Malaysian athletes is minimal. A Scopus search relating to mental health in sports in Malaysia yielded 25 publications. This information scarcity challenges establishing effective mental health support systems for athletes. Exploring the epidemiology of mental illnesses, methods of service access, demographics of clinical service users, and services or treatment utilisation allows us to identify areas within the service that can be modified or improved for better mental health support [3, 4]. A clinical audit of the SPC can serve as a valuable tool to address this gap. Such data is crucial for informing future improvements in sports mental health services and ensuring athletes receive the support they need.

This study aims to evaluate the types of mental health diagnoses among athletes attending the SPC and analyse associated demographic information. By doing so, it seeks to enhance the understanding of mental health issues in

Malaysian athletes and contribute to the development of more effective mental health interventions and support systems for this population.

Methods

This study is a retrospective clinical audit of the SPC. The audit included athletes who sought psychiatric consultation at the SPC between 1 September 2021 and 31 October 2024. The inclusion criteria required participants to be athletes and receive a formal psychiatric diagnosis from SPC. Exclusion criteria encompassed non-athletes and individuals who did not attend the initial consultation. Data were retrieved from electronic medical records maintained by the clinic. The collected variables included age, gender, type of sport, referral source, clinical diagnosis, and treatment received. To ensure confidentiality, all data were anonymised. Only the treating healthcare professionals were involved in the data retrieval and anonymisation processes. The institute's ethics board was consulted, and no prior approval was required from the board due to the anonymised nature of the secondary data, and informed consent was not required for this study.

Psychiatric diagnoses were made based on the criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) [5]. Each diagnosis was confirmed by either the clinic's attending psychiatrist or the clinical psychologist. Additionally, specific athlete-related mental health concerns and medical conditions, such as athlete burnout, migraine, and post-concussion syndrome, were identified and recorded as distinct categories where applicable. It is important to note that some athletes had multiple diagnoses, and each diagnosis was counted individually during data collection to ensure comprehensive reporting.

Descriptive statistics were used to summarise the data, providing an overview of the sample's demographic and clinical characteristics. Measures such as mean, standard deviation, frequencies, and percentages were used to describe the continuous and categorical variables.

Results

A total of 31 subjects were initially identified for this study. Of these, twenty-seven subjects were included in the final analysis. Four subjects were excluded from the study: two were non-athletes, and two did not attend the initial consultation. The athletes ranged from 10–39 years, with a mean age of twenty-one and a standard deviation of 6.41. Female athletes constituted 63% of the study population.

Table 1. Types of sports involved by the athletes in the sports psychiatry clinic

Archery	Figure skating	Rowing
Badminton	Gymnastics	Rugby
Bodybuilding	Jujitsu	Shooting
Bowling	Para-athletics	Silat
Discus throwing	Para-badminton	Tennis
Diving	Para-swimming	Triathlon
Esports	Ping pong	Wushu

Most athletes (59%) were referred to the Sports Psychology Clinic (SPC) from a sports institute. Table 1 details the variety of sports and parasports played by the athletes. The athletes' competitive levels varied, encompassing school-level participants to those representing at the national level. The number of athletes involved in each sport and competitive level is not disclosed to ensure the athletes' anonymity.

The diagnoses identified among the athletes can be broadly categorised into Neurodevelopmental Disorders, Depressive Disorders, Anxiety Disorders, Obsessive and Compulsive Disorders, Trauma and Stress-Related Disorders, Somatic Symptom Disorders, Sleep Disorders and Personality Disorders. A notable finding was that 35% of all DSM-5 diagnoses were classified under anxiety disorders. The detailed breakdown of the diagnoses is presented in Table 2. In addition to DSM-5 diagnoses, three relevant non-DSM-5 diagnoses were identified: athlete burnout, migraine, and post-concussion syndrome. Ten subjects had two or more diagnoses, increasing the total number of diagnoses to 39. Two athletes did not receive any diagnosis.

Regarding treatment modalities, the athletes predominantly received either medication only or a combination of medication and psychotherapy, with each accounting for 30% of the treatments administered. Psychotherapy alone was the chosen treatment modality for 15% of the athletes. The medication prescriptions were notably dominated by antidepressants, which constituted half of all medications prescribed. Tables 3 and 4 provide the frequency of the treatment received. The psychotherapies provided in the SPC are cognitive behaviour therapy, exposure and response prevention therapy and acceptance commitment therapy. The type of psychotherapies is limited to the training of the healthcare professionals in SPC.

In summary, the study population was comprised predominantly of young female athletes referred from sports institutes. Anxiety disorders were the most common diagnosis, and a significant portion of the athletes received antidepressant medications as part of their treatment. The treatment approach frequently involved medication, either alone or in combination with psychotherapy, underscoring

Table 2. Diagnoses made for the athletes in the sports psychiatry clinic

Diagnosis	Frequency (n = 39*)	Percentage (% of n)
Neurodevelopmental Disorder		
Attention Deficit Hyperactivity Disorder	1	2.6
Learning Disorder	1	2.6
Depressive Disorders		
Persistent Depressive Disorder	1	2.6
Major Depressive Disorder	5	12.8
Anxiety Disorders		
Panic Disorder	5	12.8
Panic attack (performance-related)	1	2.6
Generalised Anxiety Disorder	4	10.3
Social Anxiety Disorder	1	2.6
Unspecified Anxiety Disorder	3	7.7
Obsessive-Compulsive Disorders		
Obsessive-compulsive disorder	2	5.1
Trauma & Stress-related Disorders		
Adjustment disorder	2	5.1
PTSD	1	2.6
Somatic Symptom Disorders		
Functional Neurological Disorder	2	5.1
Sleep Disorders		
Primary insomnia	1	2.6
Personality Disorders		
Narcissistic personality disorder	1	2.6
Non-DSM-5 Disorders		
Burnout	1	2.6
Migraine	2	5.1
Post-concussion syndrome	3	7.7
Nil diagnosis		
Nil diagnosis	2	5.1

Notes: *n is the number of diagnoses made. Some athletes have two or more diagnoses.

Table 3. Types of treatment received by the athletes in the sports psychiatry clinic

Treatment Received	Frequency (%)
Psychotherapy	4 (15)
Medication	8 (30)
Psychotherapy + Medication	8 (30)
No treatment	7 (25)
Total	27 (100)

the integrated approach to managing mental health issues in athletes.

Discussion

Anxiety disorders were identified as the most prevalent mental health issues among the athletes in this study, with

Table 4. Breakdown of treatment received by the athletes in the sports psychiatry clinic

Treatment Breakdown	Frequency (%)
Psychotherapy	12 (33)
Antidepressants	12 (33)
Benzodiazepine	10 (28)
Stimulant	1 (3)
Paracetamol	1 (3)
Total	36 (100)

panic disorders and generalised anxiety disorders being the top two. Sports-specified risk factors for anxiety disorders include the sense of pressure to perform, public scrutiny, injury, career dissatisfaction and harassment/abuse. Assessment of anxiety disorders needs to differentiate between competition-induced-hyperarousal, competitive performance anxiety and anxiety and anxiety disorders. Management will need to be tailored according to the type of anxiety, with the latter two benefiting from active intervention. Co-morbid medical conditions, e.g. asthma, will need to be taken into consideration and co-manage in a multi-disciplinary team [6].

Functional movement disorders (FMD) represent another critical area of concern in sports psychiatry. FMD can significantly impair an athlete's ability to perform and can be psychologically distressing [7]. It potentially could be the end of an athlete's career, too. The aetiology of FMD is complex and often involves a combination of psychological, biological, and social factors [8]. In athletes, stress, anxiety, and psychological trauma are commonly linked to the onset of these disorders [9]. The two cases of FMD in the clinic were precipitated by the presence of anxiety and distress associated with injuries. Treatment for FMD typically involves a multidisciplinary approach, including physical therapy, psychological interventions, and medication [10]. Sports psychiatrists are crucial in identifying the psychological underpinnings of FMD and providing appropriate therapeutic interventions to address both the physical and mental aspects of the disorder [11].

Limitations

While this study provides valuable insights into the mental health diagnoses and treatment modalities among athletes, several limitations must be acknowledged. The study's sample size is relatively small, with only twenty-seven athletes included, which may limit the generalizability of the findings. Additionally, excluding four subjects due to non-athlete status or failure to attend the first consultation could introduce selection bias. However, no similar data is available within the country or the region for comparison. The small sample size could also represent reduced uptake

of SPC services due to the lack of awareness of service availability or stigma and discrimination of mental illnesses. The latter is experienced amongst Malaysia athletes either by discriminatory labelling, gender stereotyping, and negative presentation in media [12].

Conclusion

To advance sports psychiatry in Malaysia, several steps can be taken. Developing specialised training programs for sports psychiatrists and mental health professionals focusing on the unique needs of athletes is crucial. Encouraging more research in sports psychiatry to build a robust evidence base for effective interventions and treatments tailored to athletes will also be necessary. Promoting collaboration between sports organisations, mental health professionals, and medical practitioners to create integrated care models that support the holistic well-being of athletes is essential. Additionally, advocating for policies that recognise the importance of mental health in sports and allocating resources to develop and sustain sports psychiatry services will be vital [13]. By addressing these areas, Malaysia can enhance the mental health support available to athletes, ultimately contributing to their overall well-being and performance excellence.

References

1. Claussen MC, Currie A, Koh Boon Yau E, Nishida M, Martínez V, Burger J, et al. First international consensus statement on sports psychiatry. Scand J Med Sci Sports. 2024;34:e14627. https://doi.org/10.1111/sms.14627
2. Reardon CL, Hainline B, Aron CM, Baron D, Baum AL, Bindra A, et al. Mental health in elite athletes: International Olympic Committee consensus statement (2019). Br J Sports Med. 2019;53:667–99. https://doi.org/10.1136/bjsports-2019–100715
3. Liang D, Mays VM, Hwang WC. Integrated mental health services in China: challenges and planning for the future. Health Policy Plan. 2018;33(1):107–22. https://doi.org/10.1093/heapol/czx137
4. Ford T. Practitioner Review: How can epidemiology help us plan and deliver effective child and adolescent mental health services? J Child Psychol Psychiatry. 2008;49:900–14. https://doi.org/10.1111/j.1469–7610.2008.01927.x
5. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. 2013.
6. Reardon CL, Gorczynski P, Hainline B, Hitchcock M, Rice S. Anxiety Disorders in Athletes. Clin Sports Med. 2024;43:33–52. https://doi.org/10.1016/j.csm.2023.06.002
7. Stone J, Carson A, Sharpe M. Functional symptoms and signs in neurology: assessment and diagnosis. J Neurol Neurosurg Psychiatry. 2010;81(1):37–45. https://doi.org/10.1136/jnnp.2004.061655
8. Pick S, Goldstein LH, Perez DL, Nicholson TR. Emotional processing in functional neurological disorder: a review, biopsychosocial model and research agenda. J Neurol Neurosurg Psychiatry. 2020;91(6):636–44. https://doi.org/10.1136/jnnp-2018–319201
9. Perez DL, Aybek S, Popkirov S, Kozlowska K, Stephen CD, Anderson JA, et al. A review and expert opinion on the neuropsychiatric assessment of patients with functional neurological disorder. J Neuropsychiatry Clin Neurosci. 2021;33(1):14–26. https://doi.org/10.1176/appi.neuropsych.19120357
10. Espay AJ, Aybek S, Carson A, Edwards MJ, Goldstein LH, Hallett M, et al. Current concepts in diagnosis and treatment of functional neurological disorders. JAMA Neurol. 2018;75(9):1132–41. https://doi.org/10.1001/jamaneurol.2018.1264
11. Mikhael MR, Bakheit AM, Finch P. Management of functional neurological disorder: a review. Adv Clin Neurosci Rehabil. 2019;18(2):6–9.
12. Foong PLC, Wong RSK. Understanding mental health in Malaysian elite sports: A qualitative approach. Malays J Mov Health Exerc. 2021;10(1):33–41. https://doi.org/10.4103/2231–9409.328215
13. Verma S, Sharma D, Agrawal S. The future of sports psychiatry in Asia: Current status and the way forward. Asian J Psychiatr. 2019;44:124–130.

History
Received January 20, 2025
Accepted February 1, 2025
Published online March 7, 2025

Conflict of interest
The authors declare no conflict of interest.

ORCID
Eugene Koh Boon Yau
https://orcid.org/0000-0003-1953-8540
Anis Naazira Abdul Rauf
https://orcid.org/0009-0001-8502-2668
Nicholas Pang Tze Ping
https://orcid.org/0000-0003-1659-6374
Mohammad Hamiruce Marhaban
https://orcid.org/0000-0003-1524-1440

Dr. Eugene Koh Boon Yau
Department of Psychiatry
Universiti Putra Malaysia
43400 Serdang
Malaysia
eugene@upm.edu.my