Mental Health Emergencies

Alan Currie 💿 and Allan Johnston 💿

Introduction

What constitutes a mental health or psychiatric emergency might seem self-evident, but it is nonetheless important to be clear about how this situation is described and defined. To do so, it is helpful to draw parallels with other medical emergencies and, in addition, to consider the key components of a mental health emergency.

Examples of other medical emergencies in sport might include a compound fracture in a high-speed sport such as cycling or a player who collapses on the field of play as a consequence of a cardiac condition. In each case, a medical concern has presented itself suddenly, there is a high risk of an adverse outcome, and an immediate response is required. The latter two features in particular are the hallmarks of any medical emergency.

In psychiatric practice, the equivalent presentation would be an acute disturbance in an individual's mental state that poses a significant risk and that requires an urgent response (Table 20.1) [1]. Occasionally (and often with the benefit of hindsight), a mental state disturbance has a more insidious or subacute presentation but one that culminates in a scenario of high risk requiring an immediate response. A disturbance in mental state will be associated with either underlying mental health symptoms or disorders or with another medical disorder such as delirium. A disturbance can include features such as agitation, aggression, or violence [2, 3]. Other important characteristics of the mental state can include impairments in insight and judgment [3]. The risks posed by

Department of Sport and Exercise Sciences, University of Sunderland, Sunderland, UK e-mail: alan.currie@cntw.nhs.uk

A. Johnston Derbyshire Healthcare NHS Foundation Trust, Killamarsh, UK

English Institute of Sport, Sheffield, UK e-mail: Allan.Johnston@nhs.net

Table 20.1 Features of a mental health emergency

Sudden (acute) presentation	The mental state disturbance appears without a prior warning With hindsight, it may become apparent that there was a prodromal period or that early warning signs were present	
High risk	The most obvious are the immediate risks to the safety of self and/or others Other risks may emerge. For example, in mania, these can include significant financial risk or social embarrassment	
Immediate	Immediate safety is of primary concern	
response required	 Other concerns are: Ready availability of clinical expertise Knowledge of how to access this immediately 	

these mental state disturbances might be to the individuals themselves, to others in the vicinity, or to both [1, 3]. Risks to the individual might arise from suicidal thinking, intent, or behavior or from impaired judgment or recklessness (e.g., in mania, psychosis, or delirium), and risks to others may arise from disinhibited aggression or homicidal thoughts and behaviors. These situations require a rapid response, where safety is the primary consideration and where there should be ready availability of a clinical assessment [1]. Knowledge of the features of the emergency presentation can be invaluable later when planning preventative steps and early interventions for possible future episodes.

Prevalence

An important point about mental health emergencies in sport is that the entire range of mental health symptoms and disorders can present with acute disturbances and associated risks requiring urgent attention [1]. An emergency may result from delirium, substance use disorders, psychotic or bipolar disorders, depressive disorders, anxiety and related disorders, eating disorders, and personality disorders.



A. Currie (\boxtimes)

Regional Affective Disorders Service, Cumbria Northumberland Tyne and Wear NHS Foundation Trust, Newcastle, UK

[©] The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

C. L. Reardon (ed.), Mental Health Care for Elite Athletes, https://doi.org/10.1007/978-3-031-08364-8_20

Capturing data on mental health emergency presentations in elite sport is difficult, and the available data are likely to represent an underestimate. For example, at the 2012 Olympic Games in London, a dedicated mental health service for more than 10,000 athletes recorded only four mental health emergencies (International Olympic Committee (IOC)/cognacity data). Athletes may not present with emergency symptoms for the same reasons that they do not present with mental health symptoms generally, including stigma, low levels of mental health literacy, negative past experiences of seeking help, and busy schedules [4]. In addition, symptoms may resolve relatively quickly with supportive interventions, and the crisis may be short-lived. At a major games event, there may be "more pressing" issues such as injury or performance concerns, and mental health symptoms, despite their acuity, may not be addressed until later when the athlete returns home, or they may be managed in the moment without being systematically recorded. Initiatives to improve the availability of mental health services during major events were established around the delayed 2020 Olympic and Paralympic Games in Tokyo. The "Mentally Fit" campaign of the International Olympic Committee (IOC) provided all athletes access to a range of resources, educational materials, and a 24-hour helpline, accessible via a quick response (QR) code and publicized widely around the Games' sites and venues. The helpline was available in multiple languages and offered immediate triage and short-term therapeutic support if indicated. It was provided by Workplace Option LLC (a global well-being solutions provider) in partnership with the IOC and available in the immediate lead up to, during, and for an additional 3 months following the Games.

Types of Mental Health Emergencies

Delirium

Delirium may be a consequence of an underlying medical condition or its treatment, drug intoxication or withdrawal, or occasionally a toxin such as from an insect bite [5]. Because of its relationship with underlying medical conditions, delirium is often considered a disorder of old age. It is certainly more common in that age group and is less common in the age groups most represented in elite sport. However, some specific types of delirium have been reported in elite sport, e.g., after a concussion [6], secondary to hyperthermia, which may be exacerbated by stimulant use [7], or secondary to hyponatremia, which may be associated with overzealous hydration [8, 9].

Substance Use Disorders

Substance use disorders may lead to an emergency presentation as a consequence of either intoxication or withdrawal [1]. Athletes are known to misuse a range of substances that might lead to such a presentation. The pattern of alcohol use in elite sports indicates a prevalent binge pattern rather than regular heavy drinking, although both are seen [10-12]. This might make presentation during intoxication more likely than during withdrawal, although either is possible [1]. Perhaps the most important effect of alcohol is as a moderator of violent behavior and suicidal ideation via its disinhibiting effects. Cannabis is a common substance of misuse in certain sports [13], and the most common adverse effects are mild [14], although paranoid symptoms and severe acute anxiety have been reported, especially when high-potency preparations are used [15, 16]. Anabolic androgenic steroids (AAS) may be misused by elite athletes to improve performance [17]. Mood disturbances and psychotic symptoms can emerge. These are usually subsyndromal for either a hypomanic or psychotic episode, although higher doses and the use of multiple agents are associated with more severe disturbances of mental state [18-21]. AAS use may be associated with suicidality via at least two different mechanisms [22]. First, those who are current users may experience rapid mood changes associated with impulsive acts including the sudden emergence of suicidal thinking and behavior. Second, former users may develop more enduring mood disturbances including depression that is associated with sustained suicidal thoughts, intent, and plans. Stimulant drugs are also occasionally used by athletes either for recreational purposes or for performance enhancement [17]. They can promote significant agitation, aggression, and even psychotic symptoms [23, 24] and are associated with an increased risk of hyperthermia [7]. Opioids are an important class of drugs that can be misused by athletes [25, 26]. These are frequently taken by injured athletes either illicitly or as prescribed and are a commonly used substance in self-poisoning. In England, they account for 31% of self-poisoning fatalities (https:// sites.manchester.ac.uk/ncish/reports/).

Bipolar and Psychotic Disorders

The incidence and prevalence of bipolar and psychotic disorders in elite sport are not known [27, 28]. What is known is that the age of onset of these disorders overlaps with the peak age of sporting performance [29] and that both of these conditions can lead to an emergency presentation [1]. For example, acute mania is associated with risky activities resulting from elevated mood, disinhibition, and impaired insight. Examples include excess spending, dangerous driving, or increased sexual activity [30]. The risks associated with an acute psychotic presentation might result from severe agitation, disorganized behavior, or behaviors associated with paranoid delusions or hallucinations [31].

Depression

Depressive symptoms are approximately as common in elite athletes as in the general population [32], and there are some sport-specific issues that may be associated with an emergency presentation. First, there is a relationship between depressive symptoms and sports injuries [33] and between sports injuries and complex emotional reactions including anger [34, 35]. Anger and depression in combination can serve to increase the risk of suicidal behavior. Second, depressive symptoms may be missed, at least in the early stages, with athletes reluctant to disclose symptoms [4, 36] or where symptoms are misattributed to overtraining [37]. A delay in symptom presentation or recognition increases the possibility of an emergency presentation if symptoms progress and the athlete reaches a crisis point [1].

Suicide

In a recent study of 402 elite athletes, the prevalence of suicidal thoughts was 15.6% (men, 17.4%; women, 14.2%). Despite one in six elite athletes reporting suicidal thoughts, 97% of those with such thoughts did not attempt suicide at any time. Among female athletes, a history of sexual abuse was the strongest determinant of both suicidal thoughts and actions, followed by the psychological sense of perceiving life as less-comprehensible, manageable, and meaningful. Among male participants, the main determinant of suicidal ideation was using an avoidant strategy for coping with life challenges [38].

Self-Harm

Self-harm can be defined as "any act of self-injury carried out by an individual irrespective of motivation." The exact rates are hard to discern, as most acts of self-harm do not result in presentation for medical attention. Self-harm is more common in women, and 16.7% of females will selfharm at some point in their lives compared to 4.8% of men [39]. Many people use self-harm, especially self-cutting, to help manage distress and report that their actions do not have suicidal intent. Some report that their self-cutting is a way of preserving their life and is done to "reduce" suicidal thoughts, plans, or actions [40, 41].

Anxiety Disorders

Panic disorder, which is characterized by the abrupt onset of severe anxiety, is perhaps the most likely of the anxiety disorders to present as an emergency and is reported in 4.5% of elite athletes [42]. Phobias may also present suddenly, e.g., acute severe anxiety secondary to a flying phobia in an athlete who is traveling to an event and who may have been previously sensitized by an adverse flying experience [43].

Post-Traumatic Stress Disorder (PTSD)

This and related conditions may be more prevalent in elite athletes than in the general population, with reported rates of 13–25% in some studies. Contributory factors might include trauma directly experienced through sports participation, e.g., a severe sports injury or the traumatic consequences of abusive dynamics within sports teams [44].

Eating Disorders

Eating disorders are known to be prevalent in elite sports [45] but are more likely to require ongoing mental health treatment, support, and monitoring than to need an urgent mental health response. For an athlete with an eating disorder, the risks that require an urgent and immediate response are usually the result of general medical issues such as electrolyte disturbance, cardiac arrhythmias, or fractures [46]. However, these might lead to an athlete being deselected, which can result in significant emotional decompensation and an emergency mental health presentation [47].

Personality Disorders

Disorders of personality represent enduring patterns of inner experiences and outward behavior that are maladaptive, inflexible, and pervasive [5]. In consequence, management of these difficulties usually requires a long-term approach that can include extended psychotherapy. Nonetheless, emergency presentations can occur, and periods of significant emotional disturbance can be seen. For example, there are specific features of borderline personality disorder that are likely to promote a mental health emergency. Traits of this condition in the absence of the full syndrome can be similarly problematic. In this disorder, sufferers can be acutely sensitive to perceived rejection or abandonment and may respond with sudden and dramatic changes in mood with prominent and occasionally explosive anger. Behaviors in response to perceived rejection can also include impulsive acts such as self-harm or even suicidal behavior. In the context of elite sport, there are many potential triggers for this, most obviously if the athlete is deselected ("rejected"). Limited data also point to this being the most common subtype of personality disorder in competitive athletes [48]. Of particular note is the common comorbidity with borderline personality disorder of both eating disorders [49] and AAS use [18], and an athlete deselected for medical complications of an eating disorder or a doping violation may therefore be at an especially high risk.

Guidelines

An individual mental health emergency may in itself be unexpected, but for there to be "any" emergency is an expected occurrence at some point, and this requires advanced planning. Guidelines emphasize the helpfulness of a prepared written action plan detailing how to respond. Plans highlight the importance of, first, recognizing that it is an emergency, and second, clarity on the roles and responsibilities of staff and other team members. Safety is paramount, and good plans include the importance of knowing who to call and where the nearest facilities and expertise are located [50]. Plans that are consistent with other emergency situations and follow a similar template are valuable in this respect as general medical staff members will have greater awareness of the common elements of a response to a cardiac, musculoskeletal, or mental health emergency.

Planning Ahead

Those who work in sport recognize the value of planning ahead to mitigate or avoid adverse events, and advanced planning can lessen the impact of a mental health emergency presentation. Recurring crises of a similar nature or with the same individual should also be a signal to take a step back and evaluate what might need to be addressed in the organization or team's response or with the individual. Are there important gaps in service provision or response? Is it necessary to have a more detailed understanding of the athlete's underlying difficulties, perhaps via an expert mental health assessment by a sports psychiatrist? Planning ahead will include developing familiarity with local mental health and emergency services. This applies to the services that are nearest to where the athlete or team is usually based. Importantly, it also extends to familiarity with the nearest and best services when traveling, especially with an athlete known to have a mental health disorder where an emergency presentation is possible.

Some sports organizations have created their own guidelines to assist support staff in planning for major events. Figure 20.1 is based on a template prepared by the Mental Health Expert Panel (MHEP) of the English Institute of Sport (EIS) and circulated to all sports in the UK and their respective support staff in preparation for a major international multisport event. The template includes simple points such as ensuring an adequate supply of medication, having more detailed information on the athlete's illness history, and the athlete's view of what is likely to be helpful in a crisis. It also includes a prompt to develop a more detailed mental health-care plan if this is necessary or desirable.

An example of a more detailed care plan is shown in Fig. 20.2. It is designed to be used by more specialist mental health staff such as a psychiatrist or clinical psychologist. It follows the biopsychosocial model that is familiar to most mental health practitioners and that allows for a comprehensive evaluation and subsequent interventions accounting for multiple relevant factors. The document also includes references to the principles of an individualized Wellness Recovery Action Plan (WRAP) such as daily health maintenance activities alongside identifying and responding to triggers and early warning signs [51]. Plans such as these are commonly used in many mental health services and have utility in avoiding or managing an emerging crisis [52].

Roles and Responsibilities

It is in the nature of emergencies that a rapid and decisive response is likely to be needed. For this reason, a clear and simple plan that describes the responsibilities of medical and support staff should be readily available and understood by all.

All staff should be aware of how to recognize an emergency, and whilst it is usually self-evident, it is nonetheless advisable to describe and define the scenarios that constitute an emergency. Examples of scenarios where there is a high level of risk that requires an immediate response include suicidal or homicidal ideation, highly agitated or threatening behavior, acute psychosis, delirium, confusion, intoxication, or overdose. All staff should also know who to contact for further help including the details of the local emergency services.

For most staff faced with an emergency, the first person to contact is likely to be a member of the medical team. This As the event approaches, it is important to consider the mental health of those traveling as part of your team and to plan proactively.

It is recommended to consider the following during preparation:



A more detailed guidance to help with the planning of mental health support for specific athletes and staff with known mental health problems is also available via the mental health clinicians (psychiatrists and clinical psychologists) working with your team.

Fig. 20.1 A template for mental health considerations in pre-event planning

might be the team doctor as there may not always be a trained mental health professional such as a psychiatrist or clinical psychologist readily available. Medical staff will be in a position to conduct an initial assessment, including assessing for any injuries or ingestion of harmful substances and deciding whether to call for emergency services or transport to the nearest emergency department. Medical staff will also be alert for signs of delirium on intoxication. If there are trained mental health personnel nearby or readily accessible, they will also have a role in the initial assessment, de-escalation, arranging for further investigations, and prescribing of any necessary medications. The standard advice for mental health professionals is to try where possible to follow their usual emergency assessment processes even though the assessment may take place in unusual or suboptimal surroundings such as a

Template for mental healthcare

This document is intended to help with planning of mental health support in advance of a major event. The document can be used to support any athlete or staff member with a known mental health problem and would be developed in conjunction with their mental health practitioner.

The template uses the biopsychosocial model as its framework. This is a model that is a widely used and accepted way of understanding mental health concerns. It should provide a holistic and person-centred care plan to support mental health.

Biological		Psychological	Social	
• E 	Ensure optimum physical nealth (e.g., analgesia) and any health monitoring needed e.g., blood tests).	 Develop a contact plan between the individual and their usual mental health clinician or mental health support team. 	 Develop a contact plan with informal sources of support at home (friends and family, etc.). Review the necessity for 	
• F r s	Review mood. Diarise or self- monitor using biological symptoms such as sleep, appetite and energy.	 Consider rating symptoms using tools such as PHQ9 for depression and GAD7 for anxiety. Ensure there are baseling ratings for 	contact with team members, local practitioners, or services at the event. What is their availability and how will they be contacted?	
• (s i (r	Dptimise sleep. Attend to sleep hygiene. Implement nterventions such as sleep CBT or medication as necessary.	 Risk assessment and safety planning when relevant. 	• Anticipate any restrictions that might impede access to support, e.g., isolation requirements. Develop contingency plans to	
• E (r c	Ensure optimal nutrition. Consider specific dietary needs especially if there are concerns regarding energy availability, RED-S, or	• Consider if any specific resources or expertise may be needed, e.g., ready access to de-escalation exercise in a crisis.	accommodate these.Plan for downtime and access to quiet spaces.	
• (Consider any alcohol or illicit	Consider using the Wellness Recovery Action Plan (WRAP)	 Take one or two special home comforts with you. 	
5 \ \	substance use. Aim to stabilise well in advance (including safe withdrawal if needed).	structure to plan self-care.	 Reflect on usual routines and activity schedule. In particular, incorporate the little events during the day that help to 	
• 1 a a a	Medicines monitoring: ensure adequate supply. Adjust dosing schedule to accommodate time zone, climate, and competitive		sustain good health, including mental and other aspects of physical health. Ensure these are available and scheduled.	
S	schedule.		 Pre-plan how you will use and access social media (if at all). 	

Fig. 20.2 Pre-event planning for mental health practitioners in sport including a Wellness Recovery Action Plan. *CBT* cognitive behavioral therapy, *RED-S* relative energy deficiency in sport, *PHQ9* Patient Health Questionnaire-9, *GAD7* General Anxiety Disorder-7

Wellness Recovery Action Plan (WRAP)

Consider writing out your own plan in each of the four areas below. It is a personal document, though others may help you develop it. Keep it safe and readily accessible. Share it with those you trust, including any mental health practitioners with whom you are working, if you wish.

<u>1. How does 'well' feel? What are your signs of good mental health?</u> Describe yourself when you are well.

What feelings, actions, and behaviours are associated with this?

What does your 'inner voice' say when things are going well?

2. What keeps you well? What techniques or strategies have helped before? Some people call this their 'wellness' toolbox. It might include:

- contacting friends, family and other supporters
- relaxation exercises and other stress reduction techniques
- focusing exercises
- affirming activities (take a moment to read or make a list of positive affirmations)
- diet
- light (e.g., time in daylight, low level lighting before sleep)
- good sleep quality

<u>3. Triggers for stress? What factors might affect you?</u> What events or circumstances make you feel uncomfortable?

Recognising what might happen and dealing with the normal reaction to these events can prevent things from becoming worse.

<u>4. Early warning signs? What symptoms might you notice when becoming stressed?</u> Debriefing after a previous crisis or significant health concern can be a helpful (albeit retrospective) way of identifying these early signs.

Consider reviewing a previous episode of distress/crisis with one of your supporters, perhaps including your mental health clinician.

Fig. 20.2 (continued)

hotel room or training facility [1, 53]. A collateral history from a close friend, teammate, or staff member who knows the athlete well can be helpful in determining the origins of the emergency presentation. Other staff may be trained in verbal de-escalation techniques, and this can be invaluable for the distressed, disturbed, or potentially aggressive athlete.

Management

General Management Issues

When there is an imminent risk of violence, the priority is safety. This means not only keeping the athlete safe but also considering the safety (general physical and psychological) of others in the vicinity [54]. If possible, bladed items and any poisons or toxins should be carefully removed from the athlete's possession. If there is no concern about imminent violence or need for immediate medical attention, then the priority is to connect with the athlete and help them manage their distress. Although it is an important principle to pursue the least-restrictive or coercive management option, it is nonetheless essential that the chosen option be safe.

Verbal De-escalation

Skills in verbal de-escalation are central and can reduce the need for medication to manage acute behavioral disturbances [55]. Medication can still be considered as an option to supplement verbal de-escalation or if verbal de-escalation is unsuccessful, with the safety of athletes and others in close proximity as the primary concern [1, 2].

Four stages of verbal de-escalation are described (Table 20.2.) The process begins with engagement, then moves onto establishing collaboration, the actual de-escalation, and ends with a debriefing. De-escalation requires some specialist training but can be an extremely helpful designated role within a support team.

Engagement includes simple measures such as polite, clear introductions. The athlete should be helped to orient to their surroundings and provided with reassurance. It is helpful to use short, simple sentences and phrases and to keep the personnel involved to a safe minimum, as multiple interactions can be overstimulating and confusing and can heighten agitation. There are techniques that will help foster a collaborative relationship even in an acute situation. These are based on active listening, which can be conveyed through speech and posture and will help identify thoughts, feelings, and immediate needs. Once the athlete is engaged and collaboration is established, the next stage is to de-escalate by coaching the athlete to calm themselves and regain control of

 Table 20.2
 De-escalation stages

	2. Establishing		
1. Engagement	collaboration	3. De-escalation	4. Debriefing
Introduction	Active listening	Simple advice:	Later—When
Orientation	Conveyed	"Let's sit	patient is
Reassurance	through speech	somewhere	calmed
Concise, simple	and body	quiet and talk."	Patient and
sentences	language	Use of	clinician each
One clinician	Identify	grounding	describe what
(multiple	thoughts,	techniques, e.g.,	happened
interactions can	feelings, and	breathing,	Joint
be confusing	needs, e.g.,	visualizing a	reflection on
and may	"You seem	favorite place	what might
escalate)	troubled, would	Make an offer	help next
	you like to say	or gesture, e.g.,	time
	what's on your	warmth, food,	
	mind?"	drink	
	"You seem to be		
	anxious/scared;		
	would you like to		
	talk about that?"		
	"You seem		
	troubled/scared;		
	what would be		
	helpful to you		
	right now?"		

their emotions. Steps that can facilitate this include encouraging the athlete to find a quiet spot to sit and relay any of their concerns calmly. The athlete can be gently coached to use grounding techniques such as breathing or visualization, especially if they already have some familiarity with these exercises. Gestures such as offering something to eat or drink can be helpful too. The fourth stage is the debriefing, which can begin very quickly after the disturbance is diffused. Debriefing affords both parties an opportunity to describe and explain events from their perspectives and to reflect on what might be helpful in future situations.

Medication for Acute Behavioral Disturbances

Concerns that side effects of medication such as motor side effects, sedation, or weight gain may negatively impact performance [56–58] may be less relevant in an emergency where it may be riskier to withhold treatment and where treatment may only be needed for an extremely short period [1]. Two main groups of medications are used in the management of acute behavioral disturbances: benzodiazepines and antipsychotics [2] (Table 20.3). Benzodiazepines ought to be considered first unless there has been prior successful exposure to an antipsychotic and/or it is known that the athlete is presenting with symptoms of psychosis or mania, e.g., because of a known prior history of one of these conditions. The oral route is preferred, and if medication is indicated, then it can be used alongside verbal de-escalation, with each facilitating the other.

	Benzodiazepines	Antipsychotics
Suggested use/	If clinical information is limited	If history of bipolar or psychotic disorder
indications	No previous antipsychotic exposure	Especially if previous response to specific antipsychotic medication
	Known cardiovascular disease	Usually under the direction of a specialist (e.g., a psychiatrist)
Options	Lorazepam is preferred as it is short-acting: 1–2 mg Can be repeated after 4 h Other oral benzodiazepines (e.g., diazepam with a half-life of 30–56 h) can be used depending on availability Others: Midazolam can be administered via the buccal route Benzodiazepines may be co-administered with antipsychotics in severe cases (usually only under specialist supervision)	Drug (time of maximum plasma concentration): Aripiprazole (3–5 h) Haloperidol (2–6 h) Olanzapine (5–8 h) Quetiapine (1.5 h) Risperidone (1–2 h) Others (specialist facility only): Loxapine can be inhaled The intramuscular route (e.g., haloperidol) is only for the most severe emergencies (often called "rapid tranquilization")

Table 20.3 Medication options in acute behavioral disturbance

Other routes of administration can be used but are generally only recommended if specialist supervision or facilities are available. Midazolam (a benzodiazepine) can be administered via the buccal route, and loxapine (an antipsychotic) can be taken by inhalation. Parenteral (e.g., intramuscular) administration can only be recommended in specialist facilities and if the level of acute disturbance warrants this, e.g., if de-escalation and oral pharmacological treatment methods are impossible or ineffective and a significant risk is present. Using the parental route is often termed "rapid tranquilization," and both benzodiazepine and antipsychotics can be administered intramuscularly. It should be noted, in addition, that parenteral diazepam is not recommended because of lack of evidence, and parental midazolam is not recommended because of the risk of respiratory depression.

Specific Management Issues

There are specific management issues that need to be considered for disorders or groups of disorders.

In delirium, the two priorities are, first, not to miss the diagnosis and, second, to identify and treat the underlying cause [59]. It is important not to misattribute symptoms to another disorder such as depression (diagnostic shadowing) as delays from misdiagnosis can have serious, even fatal consequences. In cases of substance use and intoxication, it is

important to know the features of common presentations. Immediate management priorities are the initial safety of the athlete and the need for monitoring. For intoxications that are not serious or may be self-limiting, such as many cases of alcohol intoxication, it may be sufficient to monitor the athlete (e.g., in a team hotel) without transferring them to the emergency department [60]. In other instances, transfer to the emergency department will be the only appropriate response, e.g., to administer naloxone in cases of opioid intoxication [1]. Once the intoxication is cleared, then, there is a need for a timely and comprehensive mental health assessment and development of a management plan to address any underlying difficulties [61].

For the athlete experiencing psychotic symptoms or mania (bipolar disorder), then the level of disturbance may warrant an inpatient mental health evaluation [62, 63]. If this is not required, then the athlete may still need to be prescribed a pharmacological agent in addition to the usual deescalation measures. It is recommended to use benzodiazepines if the athlete is treatment-naive and/or their past history is unknown [2]. If the athlete has had previous exposure to antipsychotic medication or is in a specialist mental health facility, then antipsychotic medication can be used alone or alongside a benzodiazepine. If the athlete has a history of either psychosis or bipolar disorder, then advance planning in anticipation of an acute or emergency presentation can be especially valuable (Figs. 20.1 and 20.2).

For the athlete who may be experiencing suicidal thoughts with associated intent or behaviors, then it is essential to make a sensitive inquiry and crucial to listen to the athlete's response [64]. Immediate safety is the priority. Once the crisis is over, then it is recommended to begin developing a safety plan to deal with future eventualities during the postevent debriefing.

The management of acute, severe anxiety is largely carried out via behavioral means such as breathing or grounding techniques [43]. In some instances, benzodiazepines or betablockers may be offered, but there are concerns about their use in athletes as both may have a detrimental effect on athletic performance and are, in addition, prohibited substances in many sports [43, 57].

The emotional decompensation that can occur in athletes with underlying personality difficulties can be usually managed in the short term using techniques of psychological deescalation. There are two important principles in the preventative management of this kind of difficulty. In the long term, this type of emotional decompensation is addressed by psychotherapy or other psychological interventions that help the athlete recognize and manage difficult emotions more effectively [65]. In addition, the hotspots for emotional decompensation can often be predictable and therefore, to a degree, preventable. For example, the decision to exclude an athlete who has an eating disorder from either training or competition is one that should occur as a last resort and at the end point of clear and agreed processes supported by policies [47].

Conclusions

The elements of a mental health emergency are the sudden presentation of a disturbance in mental state that is associated with a high level of risk and requires an immediate response. Features of the mental state disturbance might include severe agitation, aggression or violence, and/or impaired insight and judgment. Recognizing that an emergency is occurring is central to an appropriate and timely response and is supported by having clear and agreed upon definitions of what constitutes an emergency. Whilst data on the incidence of emergency presentations are sparse and difficult to collect, any mental health condition could result in an emergency presentation.

Safety is paramount when responding to an emergency, and this includes the safety of not only the affected individual but also those in the immediate vicinity. All support staff should be aware of what constitutes an emergency and their role in the immediate response, which may simply be knowing who to call. Selected staff, including medical staff, may have additional expertise in the initial response including a quick assessment of any injuries, detecting evidence of ingestion of any substances, and evaluating for the presence of delirium. Some staff may also have training in verbal de-escalation techniques or in prescribing calming or tranquilizing medication. Specialist mental health staff may additionally be available to assist with a more detailed assessment in the short term including understanding the nature of any underlying mental health disorder and initiating an appropriate immediate plan of care and treatment.

It is the duty of sports organizations and teams to develop and disseminate policies and processes for identifying and responding to mental health emergencies. Support staff should be appropriately trained and confident in their role and know where, when, and how to find additional expertise if needed.

References

- Currie A, McDuff D, Johnston A, Hopley P, Hitchcock ME, Reardon CL, et al. Management of mental health emergencies in elite athletes: a narrative review. Br J Sports Med. 2019;53(12):772–8.
- Patel MX, Sethi FN, Barnes TR, Dix R, Dratcu L, Fox B, et al. Joint BAP NAPICU evidence-based consensus guidelines for the clinical management of acute disturbance: De-escalation and rapid tranquillisation. J Psychopharmacol. 2018;32(6):601–40.

- A. Currie and A. Johnston
- Newman BM, Ravindranath D. Managing a psychiatric emergency. Psychiatr Times. 2010;27(7):1–5.
- Castaldelli-Maia JM, Gallinaro JGDME, Falcão RS, Gouttebarge V, Hitchcock ME, Hainline B, et al. Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. Br J Sports Med. 2019;53(11):707–21.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5). 5th ed. Washington, DC: American Psychiatric Publishing; 2013. p. 1–947.
- Schuman G. Post concussion delirium in children: two cases. Neurology. 2014;82(10 Supplement):P5.309.
- 7. Macleod AD. Sport psychiatry. Aust N Z J Psychiatry. 1998;32(6):860–6.
- Noakes TD, Norman RJ, Buck RH, Godlonton J, Stevenson K, Pittaway D. The incidence of hyponatremia during prolonged ultraendurance exercise. Med Sci Sports Exerc. 1990;22(2):165–70.
- 9. Hew-Butler T, Loi V, Pani A, Rosner MH. Exercise-associated hyponatremia: 2017 update. Front Med. 2017;4(21):1–10.
- Green GA, Uryasz FD, Petr TA, Bray CD. NCAA study of substance use and abuse habits of college student-athletes. Clin J Sport Med. 2001 Jan;11(1):51–6.
- Zhou J, Heim D. Sports and spirits: a systematic qualitative review of emergent theories for student-athlete drinking. Alcohol Alcohol. 2014;49(6):604–17.
- Barry AE, Howell SM, Riplinger A, Piazza-Gardner AK. Alcohol use among college athletes: do intercollegiate, club, or intramural student athletes drink differently? Subst Use Misuse. 2015;50(3):302–7.
- Brisola-Santos MB, Gallinaro JGM, Gil F, Sampaio-Junior B, Marin MCD, de Andrade AG, et al. Prevalence and correlates of cannabis use among athletes—a systematic review. Am J Addict. 2016;25(7):518–28.
- Johns A. Psychiatric effects of cannabis. Br J Psychiatry. 2001;178(02):116–22.
- Castaneto MS, Gorelick DA, Desrosiers NA, Hartman RL, Pirard S, Huestis MA. Synthetic cannabinoids: epidemiology, pharmacodynamics, and clinical implications. Drug Alcohol Depend. 2014;144:12–41.
- Volkow ND, Baler RD, Compton WM, Weiss SRB. Adverse health effects of marijuana use. N Engl J Med. 2014;370(23):2219–27.
- Reardon C, Creado S. Drug abuse in athletes. Subst Abus Rehabil. 2014;5:95–105.
- van Amsterdam J, Opperhuizen A, Hartgens F. Adverse health effects of anabolic–androgenic steroids. Regul Toxicol Pharmacol. 2010;57(1):117–23.
- Bahrke MS. Psychological and behavioral effects of anabolic androgenic steroids. Int J Sport Exerc Psychol. 2005;3(4):428–45.
- Piacentino D, Kotzalidis G, Casale A, Aromatario M, Pomara C, Girardi P, et al. Anabolic-androgenic steroid use and psychopathology in athletes. A systematic review. Curr Neuropharmacol. 2015;13(1):101–21.
- Trenton AJ, Currier GW. Behavioural manifestations of anabolic steroid use. CNS Drugs. 2005;19(7):571–95.
- Thiblin I, Runeson B, Rajs J. Anabolic androgenic steroids and suicide. Ann Clin Psychiatry. 1999;11(4):223–31.
- McDuff DR, Baron D. Substance use in athletics: a sports psychiatry perspective. Clin Sports Med. 2005;24(4):885–97.
- Baron DA, Reardon CL, Baron SH. Doping in sport. In: Baron DA, Reardon CL, Baron SH, editors. Clinical sports psychiatry: an international perspective. 1st ed. Oxford: Wiley; 2013. p. 21–32.
- 25. NCAA. NCAA national study on substance use habits of college student-athletes; 2018.
- 26. Ford JA, Pomykacz C, Veliz P, McCabe SE, Boyd CJ. Sports involvement, injury history, and non-medical use of prescription

opioids among college students: an analysis with a national sample. Am J Addict. 2018;27(1):15–22.

- Reardon CL. Psychiatric comorbidities in sports. Neurol Clin. 2017;35(3):537–46.
- Rice SM, Purcell R, De Silva S, Mawren D, McGorry PD, Parker AG. The mental health of elite athletes: a narrative systematic review. Sports Med. 2016;46(9):1333–53.
- Moesch K, Kenttä G, Kleinert J, Quignon-Fleuret C, Cecil S, Bertollo M. FEPSAC position statement: mental health disorders in elite athletes and models of service provision. Psychol Sport Exerc. 2018;38:61–71.
- Goodwin GM, Haddad PM, Ferrier IN, Aronson JK, Barnes TRH, Cipriani A, et al. Evidence-based guidelines for treating bipolar disorder: revised third edition recommendations from the British Association for Psychopharmacology. J Psychopharmacol. 2016;30(6):495–553.
- Lehman AF, Lieberman JA, Dixon LB, McGlashan TH, Miller AL, Perkins DO, et al. Practice guideline for the treatment of patients with schizophrenia. 2nd ed. American Psychiatric Association; 2010. p. 1–184.
- Gorczynski PF, Coyle M, Gibson K. Depressive symptoms in high-performance athletes and non-athletes: a comparative metaanalysis. Br J Sports Med. 2017;51(18):1348–54.
- Putukian M. The psychological response to injury in student athletes: a narrative review with a focus on mental health. Br J Sports Med. 2016;50(3):145–8.
- Baum AL. Suicide in athletes. In: Baron DA, Reardon CL, Baron SH, editors. Clinical sports psychiatry: an international perspective. 1st ed. Oxford: Wiley; 2013. p. 79–88.
- Galambos SA, Terry PC, Moyle GM, Locke SA. Psychological predictors of injury among elite athletes. Br J Sports Med. 2005;39(6):351–4.
- Markser VZ. Sport psychiatry and psychotherapy. Mental strains and disorders in professional sports. Challenge and answer to societal changes. Eur Arch Psychiatry Clin Neurosci. 2011;261:182–5.
- Schwenk TL. The stigmatisation and denial of mental illness in athletes. Br J Sports Med. 2000;34(1):4–5.
- 38. Timpka T, Spreco A, Dahlstrom O, Jacobsson J, Kowalski J, Bargoria V, et al. Suicidal thoughts (ideation) among elite athletics (track and field) athletes: associations with sports participation, psychological resourcefulness and having been a victim of sexual and/or physical abuse. Br J Sports Med. 2021;55:198–205.
- National Institute for Health and Clinical Excellence. Overview self-harm in over 8s: long-term management. NICE; 2011.
- 40. Nock MK. Why do people hurt themselves? New insights into the nature and functions of self-injury. Curr Dir Psychol Sci. 2009;18(2):78–83.
- Klonsky ED, Glenn CR. Assessing the functions of non-suicidal self-injury: psychometric properties of the Inventory of Statements about Self-injury (ISAS). J Psychopathol Behav Assess. 2009;31(3):215–9.
- Gulliver A, Griffiths KM, Mackinnon A, Batterham PJ, Stanimirovic R. The mental health of Australian elite athletes. J Sci Med Sport. 2015;18(3):255–61.
- McDuff DR. Adjustment and anxiety disorders. In: Currie A, Owen B, editors. Sports psychiatry. Oxford: Oxford University Press; 2016. p. 1–16.
- 44. Aron CM, Harvey S, Hainline B, Hitchcock ME, Reardon CL. Posttraumatic stress disorder (PTSD) and other trauma-related mental disorders in elite athletes: a narrative review. Br J Sports Med. 2019;53(12):779–84.
- Sundgot-Borgen J, Torstveit MK. Prevalence of eating disorders in elite athletes is higher than in the general population. Clin J Sport Med. 2004;14:25–32.

- 46. Mountjoy M, Sundgot-Borgen J, Burke L, Carter S, Constantini N, Lebrun C, et al. The IOC consensus statement: beyond the Female Athlete Triad-Relative Energy Deficiency in Sport (RED-S). Br J Sports Med. 2014;48(7):491–7.
- Currie A, Morse E. Eating disorders in athletes: managing the risks. Clin Sports Med. 2005;24(4):871–83.
- 48. Hendawy HM, Baron DA, Sei-Eldawla A, Fekry M, Hwidi D. Prevalence of psychiatric disorders and coping processes in a sample of Egyptian competitive athletes. Faculty of Medicine, Ain Shams University; 2012. p. 60–2.
- 49. Martinussen M, Friborg O, Schmierer P, Kaiser S, Øvergård KT, Neunhoeffer A-L, et al. The comorbidity of personality disorders in eating disorders: a meta-analysis. Eat Weight Disord. 2017;22(2):201–9.
- National Collegiate Athletic Association Mental Health Task Force. Mental health best practices: understanding and supporting student athlete mental wellness; 2020. https://ncaaorg.s3.amazonaws.com/ ssi/mental/SSI_MentalHealthBestPractices.pdf. Accessed 29 Dec 2021.
- Copeland M. Wellness recovery action plan. Occup Ther Ment Health. 2002;17(3–4):127–50.
- 52. Copeland M. Overview of WRAP: wellness recovery action plan. Ment Health Recov Newslett. 2002;3:1–9.
- Currie A, Johnston A. Psychiatric disorders: the psychiatrist's contribution to sport. Int Rev Psychiatry. 2016;28(6):587–94.
- 54. Substance Abuse and Mental Health Services Administration. Practice guidelines: core elements for responding to mental health crises. Rockville, MD: Center for Mental Health Services; 2009. p. 1–14.
- 55. Richmond JS, Berlin JS, Fishkind AB, Holloman GH, Zeller SL, Wilson MP, et al. Verbal de-escalation of the agitated patient: consensus statement of the American Association for Emergency Psychiatry Project BETA De-escalation Workgroup. West J Emerg Med. 2012;13(1):17–25.
- Reardon CL, Creado S. Psychiatric medication preferences of sports psychiatrists. Phys Sportsmed. 2016;44(4):397–402.
- Reardon CL. The sports psychiatrist and psychiatric medication. Int Rev Psychiatry. 2016;28(6):606–13.
- Johnston A, McAllister-Williams RH. Psychotropic drug prescribing. In: Currie A, Owen B, editors. Sports psychiatry. 1st ed. Oxford: Oxford University Press; 2016. p. 133–43.
- Garriga M, Pacchiarotti I, Kasper S, Zeller SL, Allen MH, Vázquez G, et al. Assessment and management of agitation in psychiatry: expert consensus. World J Biol Psychiatry. 2016;17(2):86–128.
- McDuff D. Substance use and abuse. In: McDuff D, editor. Sports psychiatry: strategies for life balance and peak performance. 1st ed. Washington, DC: American Psychiatric Publishing; 2012. p. 85–128.
- Donohue B, Loughran T, Pitts M, Gavrilova Y, Chow GM, Schubert K. Preliminary development of a brief intervention to prevent alcohol misuse and enhance sport performance in collegiate athletes. J Drug Abuse. 2016;2(3):1–9.
- 62. Hirschfield RMA, Bowden CL, Gitlin MJ, Keck PE, Suppes T, Thase Michael E, et al. Treatment of patients with bipolar disorder. 2nd ed. APA Practice Guidelines; 2010. p. 1–82.
- 63. Currie A, Gorczynski P, Rice SM, Purcell R, McAllister-Williams RH, Hitchcock ME, et al. Bipolar and psychotic disorders in elite athletes: a narrative review. Br J Sports Med. 2019;53(12):746–53.
- Schreiber J, Culpepper L. Suicidal ideation and behavior in adults—UpToDate [Internet]. UpToDate; 2019. [cited 2019 Jan 29]. https://www.uptodate.com/contents/ suicidal-ideation-and-behavior-in-adults.
- 65. National Institute for Health and Care Excellence. Borderline personality disorder: recognition and management. London; 2009.