

# Multimodal treatment of attention-deficit/hyperactivity disorder and comorbid symptoms in an ultra football fan: A case report from Switzerland

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## Abstract

This case report describes the therapeutic trajectory of a 47-year-old male ultra football fan from Switzerland, who was diagnosed and treated for attention-deficit/hyperactivity disorder, together with comorbid alcohol misuse and insomnia. Prior to this episode of care, the patient exhibited symptoms of impulsivity and inattention and persistent patterns of harmful alcohol consumption, recurrently participating in football-related violence. A multimodal approach involving psychotherapy and psychopharmacology yielded notable improvements in symptom management. To date, the patient has shown improved psychosocial functioning, reporting a significant reduction in alcohol use and the cessation of all aggressive acts. Consequently, this case provides insights into the relationship between attention-deficit/hyperactivity disorder and football-related violence, underlining the potential for tailored mental health interventions to enhance overall quality of life.

## Keywords

ADHD, ultra fans, alcohol dependence, insomnia, comorbidity, violence

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## Introduction

Attention-deficit/hyperactivity disorder (ADHD) affects approximately ~2%–3% of adults.<sup>1,2</sup> Symptoms are grouped around two domains: hyperactive/impulsive and inattentive (or a combination of both), and typically impair academic, vocational, and/or social functioning.<sup>1–3</sup> ADHD can entail risks for increased comorbidities, sensation seeking, substance use, injuries, and aggression.<sup>4,5</sup> Optimized therapeutic regimens for ADHD tend to be multimodal, encompassing psychotherapy and psychopharmacology.<sup>3</sup> Notably, within different settings and demographics, psychostimulants have helped mitigate violent offending and criminality among adults with ADHD.<sup>6,7</sup>

Socioenvironmental dynamics and stigma can hinder ADHD diagnoses and treatment responsiveness,<sup>3</sup> especially in hard-to-reach populations. As often-insular communities, ultra football fans are characterized by intense team loyalty, solidarity, collectivism, and elaborate displays of support.<sup>8</sup> Demonstrations of power, strength, and masculinity are also pertinent distinguishing factors for ultras, as are concerted attempts to differentiate themselves from other groups.<sup>9,10</sup> This can heighten feelings of privacy and distrust, thereby

impeding professional and academic engagement. For example, ultras are significantly underrepresented in psychiatric literature. This knowledge gap is particularly pronounced since researchers have identified injurious patterns of drug use and aggressive behaviors in these groups, as demonstrated by data on ultras in Switzerland.<sup>10,11</sup>

Given these complex dynamics, more evidence is needed into mental health issues and treatment within ultra communities to inform applicable psychiatric interventions. Accordingly, we outline a case report of an ultra football fan who was diagnosed and treated for ADHD and co-occurring alcohol misuse and insomnia.

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## Case report

This case report describes the episode of care of a 47-year-old male ultra football fan from Switzerland, first evaluated and treated aged 40 at the specialized outpatient clinic for ADHD at the University of Zurich in March 2017. The patient presented with symptoms characteristic of ADHD, like impulsivity, forgetfulness, irritability, temper problems, and inattention, together with comorbid alcohol misuse and insomnia.

## Psychosocial history

Upon assessment, the patient reported that his father likely exhibited subthreshold ADHD symptoms and alcohol dependence. The patient's developmental history was marked by academic underachievement and behavioral problems. He also noted trouble with disorganization and forgetfulness. During secondary education, the patient attended school erratically and his poor academic performance persisted. Equally, the patient initiated alcohol and tobacco use aged 13 and misused alcohol daily from 16 to 19. In adolescence, he engaged in illegal activities, such as the procurement and sale of cigarettes and violent acts. However, he received no formal ADHD assessment or mental health diagnosis.

In adulthood, the patient experienced recurrent occupational and interpersonal instability, misusing alcohol, cannabis, amphetamines, tobacco, and cocaine. Notably, the patient became a member of an ultra fan group of a local football team and estimated he had cumulatively spent 500,000 Swiss francs attending matches in Switzerland and other countries. His participation in this ultra group coincided with numerous violent episodes involving rival fans and law enforcement, which led to multiple somatic injuries (e.g., hematomas and fractures). The patient also practiced risky sports, like downhill mountain biking and skiing, resulting in additional physical injuries.

## Assessment

Prior to his ADHD diagnosis, the patient was undergoing psychotherapeutic sessions conducted by a psychologist for sleep disruption, fatigue, and mood swings. This commenced in 2015 and was primarily motivated by repeated failures in professional examinations. Subsequently, a general practitioner referred the patient to the ADHD clinic in Zurich due to ongoing challenges with sleep, alcohol misuse, and instances of football-related violence.

In 2017, the senior author (ABu) performed a clinical ADHD evaluation using the *Homburger ADHD-Skalen für Erwachsene* (Homburger ADHD Scales for Adults—HASE).<sup>12</sup> The HASE assesses various domains, like attention, hyperactivity, impulsivity, and related symptoms. Within this context, the following tests were conducted: the *Aufmerksamkeitsdefizit-Hyperaktivitäts-Störung-Selbstbeurteilungsbogen* (Attention Deficit Hyperactivity Disorder

Self-Assessment Form—ADHS-SB), the Wender Utah Rating Scale (WURS-K), and the Wender-Reimherr Adult Attention Deficit Disorder Scale (WRAADDSI).<sup>12–14</sup>

The ADHS-SB yielded a score of 30, revealing elevated values across core areas, alongside attentional control, impulse regulation, and hyperactivity impairments. Similarly, the WURS-K provided retrospective information regarding childhood ADHD symptoms, with a sum score of 32; this reflected a history of early-onset symptoms consistent with ADHD, such as difficulties with attention, impulse control, and hyperactivity. The WRAADDSI returned a score of 46, indicating significant functional impairments associated with adulthood ADHD symptoms.

The patient fulfilled the majority of criteria classified by the International Classification of Diseases 10th Revision for alcohol dependence and was diagnosed with this disorder. Owing to his symptom presentation, the patient was also assessed using the Hamilton Depression Rating Scale and the Beck Depression Inventory,<sup>15,16</sup> though he did not reach the diagnostic threshold for depression.

## Treatment

As a first-line ADHD treatment in Switzerland, the patient was initially prescribed with long-acting methylphenidate (MPH) at a daily dosage of 36 mg, effective for around 12 h. The patient exhibited good treatment adherence, aided by efforts from the senior author (ABu) to destigmatize mental health issues and psychopharmacological treatment. However, the patient reported that he was requiring higher doses of alcohol in the evening to experience the same effects than before the long-acting MPH. Resultantly, the medication was changed to short-acting MPH at a daily dosage of 30 mg in the first months of the episode of care and no adverse outcomes or events have occurred since this transition.

Throughout the first week of treatment for alcohol dependence, the patient was prescribed with 15 mg Oxazepam three times daily as an outpatient with gradual dosage decreases to mitigate alcohol withdrawal symptoms. During this acute therapeutic phase, the patient showed good adherence and treatment responsiveness with no adverse effects. Subsequently, his alcohol dependence was treated through psychotherapy and motivational interviewing. Finally, the patient was prescribed with low-dose trazodone at 100 mg per night for his sleep disorder.

## Outcomes and follow up

As of August 2024, the patient maintains adherence to the prescribed treatment with MPH and trazodone, with no observed challenges for dependence, tolerability, or adverse outcomes. The patient has exhibited a complete cessation of football-related violence and better management of his insomnia.

Initial efforts at alcohol moderation saw continued misuse, particularly during football-related events, though in the

past 3 years there has been a marked decrease in alcohol consumption. Since the onset of care, the patient has had a stable family life and is undertaking further education. In sum, he has self-reported improved ADHD symptoms, cognitive outcomes, and psychosocial functioning.

## Discussion

To the authors' knowledge, this is the first report detailing the diagnosis and therapeutic trajectory of ADHD and comorbidities in an ultra football fan. Consequently, this contributes to the wider understanding of how ADHD symptomatology manifests within distinctive socioenvironmental settings, offering insights into patient-centered strategies for addressing the detrimental effects of this disorder.

As this case illustrates, individuals with ADHD may engage in football-related violence and ultra fandom as an outlet for sensation-seeking or high stimulation. This has been demonstrated in different settings, where ADHD and associated symptoms have been shown to be underlying factors for violence and aggressive behavior among both hooligans and ultras.<sup>17–19</sup> Specifically, data from Sweden has linked executive dysfunctions (e.g., a lack of inhibition and self-control) to aggressive acts among football fans.<sup>18</sup> Elsewhere, albeit in the context of psychopathy, researchers in Cyprus determined that impulsive-irresponsible traits influenced collective football-related violence.<sup>19</sup>

While this is a single case report and lacks generalizability, the successful course of multimodal and holistic therapy indicates the potential for targeted interventions to mitigate risks and strengthen overall functioning in individuals with ADHD and co-occurring symptoms. Furthermore, the cessation of football-related violence and reduced alcohol consumption following the administration of MPH in this patient would appear to support existing evidence highlighting the role of psychostimulants in managing behavioral issues and substance misuse.<sup>6,7,20</sup> These are particularly notable outcomes given the insular and hard-to-reach nature of ultra football fan groups,<sup>8,11</sup> which likely exacerbates mental health stigma and distrust toward medical professionals, though the limitations of this being a single case description should be reiterated.

The scarcity of psychiatric literature on ultras implies that this patient's proactive help-seeking is uncommon among these communities; instead, the closed nature of ultra groups and ideologies of power, strength, and masculinity, could present significant help-seeking barriers. Where feasible, dedicated outreach programs for football fans could accentuate the benefits of mental health care and its positive influences on quality of life. These initiatives could be underpinned by long-term engagement with fan stakeholders (e.g., fan social workers and football club supporter liaison officers) to promote health literacy and culturally sensitive interventions.

## Conclusions

This case highlights the influence of ADHD symptoms in football-related violence and the importance of patient-centered and comprehensive approaches for treating this disorder and comorbid symptoms in distinctive socioenvironmental contexts. This is exemplified by improvements in the patient's functioning, the cessation of football-related violence, and reduced alcohol consumption. Although this represents a single case, it is hoped that this can serve as a model to raise awareness of psychiatric issues and encourage help-seeking within hard-to-reach ultra football fan communities who may benefit from mental health support.

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## Author contributions

A.S., M.L., and A.Br. Conceptualization, Writing—Original Draft, Writing—Review and Editing; A.Bu. Conceptualization, Resources, Supervision, Writing—Review and Editing.

## Data availability statement

Data sharing is not applicable to this article as no data sets were generated or analyzed during the present study.

## Declaration of conflicting interests

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## Ethical approval

Ethical approval is not required for reporting individual cases or case series in accordance with local and national guidelines.

## Informed consent

Written informed consent was obtained from the patient for their anonymized information to be published in this article.

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