

**Aims.** Traumatic brain injury is a leading risk factor for degenerative conditions. Although in the past this was believed to affect mostly boxers, recent studies have expanded the at-risk population to include American football players, rugby players, hockey players and other athletes involved in contact sports. Hence, there has been growing interest in the media and the public at large on the short and long term impacts of head trauma in sportspersons. The aim of this study is provide an overview of the impact of traumatic brain injury in contact sports and the link to early onset dementia.

**Method.** For the purpose of this study we conducted a literature search using PubMed electronic base and Google scholar. The search was made in February 2021 and using the following keywords 'early onset dementia', 'presenile dementia', 'traumatic brain injury', 'contact sports', 'sportsmen', and 'athletes'. The search words were used individually and in combination to gather relevant articles. Types of studies included were case reports, case series, cohorts, cross-sectional, editorial and newspaper articles.

**Result.** Most of the published studies have shown significant associations between repeated head trauma and brain morphological changes evidenced by the presence of myelinated axons, astrogliosis, perivascular neuroinflammation and formation of phosphorylated Tau proteinopathy. These contribute significantly to alterations in axonal functioning and synaptic transmissions which sets the stage for neuronal degeneration. These changes affect both the macroscopic and microscopic structures with consequent neurochemical disturbances and functional deficits which, manifest primarily as executive dysfunction.

**Conclusion.** Current evidence supports an association between participation in contact sports and neurodegenerative disease, despite the protective aspects of sporting activities. Overall the studies reviewed have shown that brain injury remains a potent risk factor for the early onset dementia seen in sportspersons. Consequently, it is prudent for more proactive and precautionary measures to be put in place to reduce impacts of head injury and to better identify and manage brain injury in sports.

## Establishing prevalence of diagnosis of personality disorder across high secure forensic services using the ICD 10 and ICD 11 classification

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doi: 10.1192/bjo.2021.773

**Aims.** There has been an increasing recognition of the lack of clinical validity of different types of ICD10 personality disorder.

The prevalence was established among patients in a high secure hospital in England of those with either a primary or secondary diagnosis of personality disorder and its recorded type according to ICD10 and then ICD11.

The new ICD11 classification increased the validity of diagnosis of personality disorder as well as its severity.

**Background.** ICD 11 has proposed the dropping of the classification of personality disorder based on particular types of personality disorder and instead adopting a diathesis model based on 2 dimensions: presence of personality disorder and three levels of severity (Mild, Moderate and Severe) and the option of specifying one or more prominent trait domain qualifiers (Negative

Affectivity, Detachment, Disinhibition, Dissociality, and Anankastia) and also specify a Borderline Pattern qualifier.

**Method.** The electronic medical records were used to establish the presence and type of personality disorder using the criteria of ICD10 and ICD11.

The researchers assured reliability by rating some vignettes using the Schedule for Personality Assessment from Notes and Documents (SPAN-DOC) before rating actual cases.

**Result.** From a total population of 208 patients, 64(30.8%) were classified as having either a primary or secondary diagnosis of personality disorder according to the ICD 10.

30 (47%) had dissocial personality disorder (DSPD), 19(30%) emotionally unstable personality disorder (EUPD) and 8(13%) paranoid personality disorder. 20 (31%) had a comorbid diagnosis of mental illness and about a tenth had diagnoses of multiple personality disorders. These types of personality disorder diagnosed by the researchers using ICD 10 did not always match the types of personality disorder diagnosed by clinicians at the hospital.

All patients met the criteria of personality disorder under ICD 11 but the number with a borderline specifier was greater than those with an ICD10 diagnosis of EUPD. Using the trait domain qualifiers in ICD 11, patients with ICD 10 diagnoses of EUPD or DSPD showed dissociation and disinhibition, with those with a DSPD showing low and those with EUPD high negative affectivity.

**Conclusion.** The results confirm that while psychiatrists in a high secure hospital reliably diagnose the presence of a personality disorder, they are much less able to make an accurate diagnosis as to the actual type of personality disorder. The new ICD 11 classification will increase the clinical validity of the diagnosis of personality disorder and its severity.

## A study of the reasons for prescribing and misuse of gabapentinoids in prison including their co-prescription with opioids and antidepressants

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doi: 10.1192/bjo.2021.774

**Aims.** Electronic medical case files of male prisoners in a category B prison in London was studied to establish a prevalence during an 8-month period of the use of and the reasons for prescribing gabapentinoids in prison.

In addition, the prevalence of co-prescription of gabapentinoids with opioids and antidepressants was also assessed in light of the increased risk of respiratory depression resulting in death when these drugs are used in combination.

**Method.** A retrospective, SystmOne electronic case-file based survey was undertaken searching by SNOMED CT supplemented by examination of free text, in a category B prison for males (Capacity 1500 prisoners; Average turnover of prisoners up to 6000 per year), including to establish practice standards related to the prescription of Gabapentinoids in the prison and determine the compliance with these.

**Result.** In total, 109 cases were identified of prisoners having been prescribed gabapentinoids, pregabalin in 66 cases (61 per cent) and gabapentin in 43 cases (39 per cent). In 36 cases (33 per cent) prescriptions were for unlicensed indications. This in fact represented 50 per cent of the cases where the indications were documented. Half of the cases were co-prescribed